



STIC Search Report

Biotech-Chem Library

STIC Database Tracking Number: 167553

TO: Patricia Duffy
Location: rem/3B05/3C18
Art Unit: 1645
Thursday, June 30, 2005

Case Serial Number: 10/033243

From: Noble Jarrell
Location: Biotech-Chem Library
Rem 1B71
Phone: 272-2556

Noble.jarrell@uspto.gov

Search Notes

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STIC-Biotech/ChemLib

157 553

mg

From: Chan, Christina
Sent: Monday, June 27, 2005 10:15 AM
To: Duffy, Patricia; STIC-Biotech/ChemLib
Subject: RE: Sequence search please rush.. amendment due

Please ~~rush~~. Thanks Chris

Chris Chan

TC 1600 New Hire Training Coordinator and SPE 1644
(571)-272-0841
Remsen, 3E89

RECEIVED
JUN 27 2005
(STIC)

-----Original Message-----

From: Duffy, Patricia
Sent: Sunday, June 26, 2005 10:48 AM
To: Chan, Christina
Subject: Sequence search please rush.. amendment due
Importance: High

Dear Christina.

Please rush amendment overdue.

Dear Stic,

IN re: 10/033,243

Please search SEQ ID NOS:62 and 77. These are short NA.
I need a commercial and interference database search.
Please print out to 100 hits in each category.

Thank you,

Patricia A. Duffy, Ph.D.
Art Unit 1645
Remsen 3B05; Mailbox 3C18
571-272-0855

STAFF USE ONLY

Searcher: rolle
Searcher Phone: 2-
Date Searcher Picked up: 6/30/05
Date Completed: 3
Searcher Prep/Rev. Time: 3
Online Time: 3

Type of Search

NA#: 2 AA#: AA
Interference: SPDI
S/L: Oligomer
Encode/Transl: Text
Structure#: Text
Inventor: Litigation

Vendors and cost where applicable

STN: Dialog
DIALOG: QUESTEL/ORBIT
LEXIS/NEXIS: SEQUENCE SYSTEM
WWW/Internet: Other(Specify):

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GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: June 29, 2005, 20:23:08 ; Search time 1720 Seconds
(without alignments)
221.304 Million cell updates/sec

Title: US-10-033-243-62

Perfect score: 10

Sequence: 1 ndancgktcg 10

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 34239544 seqs, 19032134700 residues

Total number of hits satisfying chosen parameters: 68479088

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 100 summaries

Database :

EST:*

1: gb_est1:*

2: gb_est2:*

3: gb_hic:*

4: gb_est3:*

5: gb_est4:*

6: gb_est5:*

7: gb_est6:*

8: gb_gss1:*

9: gb_gss2:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | Query Match | Length | DB ID | Description |
|------------|-------|-------------|--------|-------|--------------------|
| 1 | 6.8 | 68.0 | 14 | 9 | CL423499 |
| 2 | 6.8 | 68.0 | 17 | 9 | AJ589126 Arabidops |
| 3 | 6.8 | 68.0 | 20 | 1 | AL043208 DXFZP434H |
| 4 | 6.8 | 68.0 | 21 | 8 | AZ863356 |
| 5 | 6.8 | 68.0 | 22 | 6 | CAB51061 D09F11_K1 |
| 6 | 6.8 | 68.0 | 22 | 9 | AJ593585 Arabidops |
| 7 | 6.8 | 68.0 | 23 | 9 | TA266D03P |
| 8 | 6.8 | 68.0 | 24 | 7 | CO784722 BL281C_A0 |
| 9 | 6.8 | 68.0 | 25 | 8 | AZ877656 BQ00754-3 |
| 10 | 6.8 | 68.0 | 28 | 1 | AA717506 |
| 11 | 6.8 | 68.0 | 28 | 7 | CF328209 NACL--03- |
| 12 | 6.8 | 68.0 | 28 | 9 | DMES45945 |
| 13 | 6.8 | 68.0 | 29 | 7 | CO789974 NT008B_G0 |
| 14 | 6.8 | 68.0 | 29 | 8 | BZ291261 |
| 15 | 6.8 | 68.0 | 33 | 4 | BG173250 602336739 |
| 16 | 6.8 | 68.0 | 33 | 8 | BZ383745 |
| 17 | 6.8 | 68.0 | 34 | 1 | AU258533 |
| 18 | 6.8 | 68.0 | 34 | 8 | BZ379444 |
| 19 | 6.8 | 68.0 | 37 | 2 | BF784959 602110922 |
| 20 | 6.8 | 68.0 | 37 | 4 | B1658475 603282093 |
| 21 | 6.8 | 68.0 | 38 | 8 | AQ025003 |
| 22 | 6.8 | 68.0 | 38 | 9 | TA335803Q |
| 23 | 6.8 | 68.0 | 38 | 9 | CL682259 PRI0133C |
| 24 | 6.8 | 68.0 | 40 | 4 | B1658553 603283781 |

| | | | | | |
|----|-----|------|----|---|-----------|
| 25 | 6.8 | 68.0 | 40 | 9 | AJ598365 |
| 26 | 6.8 | 68.0 | 40 | 9 | BM660365 |
| 27 | 6.8 | 68.0 | 40 | 9 | CL523373 |
| 28 | 6.8 | 68.0 | 41 | 1 | AJ746715 |
| 29 | 6.8 | 68.0 | 41 | 8 | BH849732 |
| 30 | 6.8 | 68.0 | 41 | 9 | CL518209 |
| 31 | 6.8 | 68.0 | 41 | 9 | CL705789 |
| 32 | 6.8 | 68.0 | 42 | 7 | CO788022 |
| 33 | 6.8 | 68.0 | 43 | 4 | BF114596 |
| 34 | 6.8 | 68.0 | 43 | 4 | B1830843 |
| 35 | 6.8 | 68.0 | 43 | 9 | AL949027 |
| 36 | 6.8 | 68.0 | 44 | 6 | CD746851 |
| 37 | 6.8 | 68.0 | 44 | 8 | BH862329 |
| 38 | 6.8 | 68.0 | 44 | 8 | BZ384007 |
| 39 | 6.8 | 68.0 | 44 | 8 | BZ763112 |
| 40 | 6.8 | 68.0 | 44 | 9 | BM001971 |
| 41 | 6.8 | 68.0 | 44 | 9 | AJ622569 |
| 42 | 6.8 | 68.0 | 44 | 9 | CC883620 |
| 43 | 6.8 | 68.0 | 45 | 8 | BZ384047 |
| 44 | 6.8 | 68.0 | 46 | 7 | CF304811 |
| 45 | 6.8 | 68.0 | 46 | 7 | CF304811 |
| 46 | 6.8 | 68.0 | 46 | 8 | BZ383801 |
| 47 | 6.8 | 68.0 | 46 | 9 | AG216853 |
| 48 | 6.8 | 68.0 | 46 | 9 | DMES46285 |
| 49 | 6.8 | 68.0 | 47 | 2 | BE534847 |
| 50 | 6.8 | 68.0 | 47 | 8 | AZ615286 |
| 51 | 6.8 | 68.0 | 47 | 8 | BH865116 |
| 52 | 6.8 | 68.0 | 47 | 8 | BH865531 |
| 53 | 6.8 | 68.0 | 47 | 8 | CG773973 |
| 54 | 6.8 | 68.0 | 48 | 8 | BZ582213 |
| 55 | 6.8 | 68.0 | 48 | 8 | CC060177 |
| 56 | 6.8 | 68.0 | 48 | 9 | AG197101 |
| 57 | 6.8 | 68.0 | 48 | 9 | BX285564 |
| 58 | 6.8 | 68.0 | 48 | 9 | CL521328 |
| 59 | 6.8 | 68.0 | 48 | 9 | AA087258 |
| 60 | 6.8 | 68.0 | 49 | 1 | AI900473 |
| 61 | 6.8 | 68.0 | 49 | 2 | BE778801 |
| 62 | 6.8 | 68.0 | 49 | 2 | BE778801 |
| 63 | 6.8 | 68.0 | 49 | 2 | BE778801 |
| 64 | 6.8 | 68.0 | 49 | 7 | U38158 |
| 65 | 6.8 | 68.0 | 49 | 8 | BZ383782 |
| 66 | 6.8 | 68.0 | 49 | 9 | AJ622567 |
| 67 | 6.8 | 68.0 | 49 | 9 | CNS07F9C |
| 68 | 6.8 | 68.0 | 50 | 1 | AU102871 |
| 69 | 6.8 | 68.0 | 50 | 1 | AU104223 |
| 70 | 6.8 | 68.0 | 50 | 1 | AU104223 |
| 71 | 6.8 | 68.0 | 50 | 1 | AU104277 |
| 72 | 6.8 | 68.0 | 50 | 1 | AU104506 |
| 73 | 6.8 | 68.0 | 50 | 1 | AU105095 |
| 74 | 6.8 | 68.0 | 50 | 1 | AU105096 |
| 75 | 6.8 | 68.0 | 50 | 1 | AU105098 |
| 76 | 6.8 | 68.0 | 50 | 1 | AU105834 |
| 77 | 6.8 | 68.0 | 50 | 1 | AU106702 |
| 78 | 6.8 | 68.0 | 50 | 1 | AU106741 |
| 79 | 6.8 | 68.0 | 50 | 1 | AU107943 |
| 80 | 6.8 | 68.0 | 50 | 1 | AU107943 |
| 81 | 6.8 | 68.0 | 50 | 8 | CC325469 |
| 82 | 6.8 | 68.0 | 50 | 9 | AL752914 |
| 83 | 6.8 | 68.0 | 51 | 1 | AI132074 |
| 84 | 6.8 | 68.0 | 51 | 2 | BE973423 |
| 85 | 6.8 | 68.0 | 51 | 5 | BU067023 |
| 86 | 6.8 | 68.0 | 51 | 5 | BU583828 |
| 87 | 6.8 | 68.0 | 51 | 6 | CD743956 |
| 88 | 6.8 | 68.0 | 51 | 7 | CN870791 |
| 89 | 6.8 | 68.0 | 51 | 9 | EX215107 |
| 90 | 6.8 | 68.0 | 51 | 9 | CC884865 |
| 91 | 6.8 | 68.0 | 51 | 9 | CG712445 |
| 92 | 6.8 | 68.0 | 52 | 1 | AI440320 |
| 93 | 6.8 | 68.0 | 52 | 6 | CB379027 |
| 94 | 6.8 | 68.0 | 52 | 7 | CR411873 |
| 95 | 6.8 | 68.0 | 52 | 8 | AZ921909 |
| 96 | 6.8 | 68.0 | 52 | 8 | BZ287252 |
| 97 | 6.8 | 68.0 | 52 | 9 | CR359266 |

| | |
|----------|--------------------|
| AJ598365 | Arabidops |
| BM660365 | Arabidops |
| CL523373 | DAL2H04 F |
| AJ746715 | AJ746715 |
| BH849732 | SALK_0702 |
| CL518209 | SAE4B10 F |
| CL705789 | EY04457-5 |
| CO788022 | NT003A_C0 |
| BF114596 | SMOAFAP |
| B1830843 | 603080959 |
| AL949027 | Arabidops |
| CD746851 | SL2_D08 S |
| BH862329 | SALK_0833 |
| BZ384007 | SALK_1349 |
| BZ763112 | SALK_1134 |
| BM001971 | Arabidops |
| AJ622569 | Drosophil |
| CC883620 | SALK_0953 |
| BZ384047 | SALK_1349 |
| CF304811 | ABF1--06- |
| CF304811 | ABF1--06- |
| BZ383801 | SALK_1345 |
| AG216853 | Drosophil |
| AJ546285 | Drosophil |
| BE534847 | 601231985 |
| H55083 | CHR220022 C |
| AZ615286 | 1M0444106 |
| BH865116 | SALK_0974 |
| BZ665531 | EY00954-3 |
| CG773973 | 1123015F0 |
| BZ582213 | 3590_1_35 |
| CC060177 | EY02776-3 |
| AG197101 | Pan trogl |
| BX285564 | Arabidops |
| CL521328 | SER2H08 F |
| AA087258 | mol2g10.r |
| AI900473 | sc11b08.y |
| BE778801 | 601463874 |
| BE778801 | 601463874 |
| BI694186 | 603347521 |
| U38158 | OSU38158 FD |
| BZ383782 | SALK_1344 |
| AJ622567 | Drosophil |
| CNS07F9C | AL608178 Anopheles |
| AU102871 | AU102871 |
| AU104223 | AU104223 |
| AU104277 | AU104277 |
| AU104506 | AU104506 |
| AU105095 | AU105095 |
| AU105096 | AU105096 |
| AU105098 | AU105098 |
| AU105834 | AU105834 |
| AU106702 | AU106702 |
| AU106741 | AU106741 |
| AU107943 | AU107943 |
| AU107943 | AU107943 |
| CC325469 | TEA087 Ba |
| AL752914 | Arabidops |
| AI132074 | un68a06.r |
| BE973423 | 601652253 |
| BU067023 | 1614_B06- |
| BU583828 | mail2b09- |
| CD743956 | IRB15_F11 |
| CN870791 | 001205AAO |
| EX215107 | Danio rer |
| CC884865 | SALK_1446 |
| CG712445 | 1119027A0 |
| AI440320 | tc82910.x |
| CB379027 | rg16h10.y |
| CR411873 | CR411873 |
| AZ921909 | HRCot3G06 |
| BZ287252 | SALK_0206 |
| CR359266 | Arabidops |

c 98 6.8 68.0 52 9 TA27H11Q AL453630 T. brucei
 99 6.8 68.0 52 9 CC886264 SALK 1483
 c 100 6.8 68.0 52 9 CL302626 G063B06 G

ALIGNMENTS

RESULT 1
 CL423499
 LOCUS
 DEFINITION 14 bp DNA linear GSS 16-MAR-2004
 01S0557-03A1-G02 UniformMu MUTAIL Library zea mays genomic clone
 01S0557-03A1-G02, genomic survey sequence.

ACCESSION CL423499
 VERSION 1
 KEYWORDS GSS.

SOURCE CL423499.1 GI:45501543

ORGANISM Zea mays

Zeasays

Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
 Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD
 clade; Panicoideae; Andropogoneae; Zea.

1 (bases 1 to 14)

Sequence tagged transposon insertions from the UniformMu maize
 population

Unpublished (2003)

Contact: Donald R. McCarty

Plant Molecular and Cellular Biology Program

University of Florida

PO 110690 Gainesville, FL 32611-0690, USA

Tel: 352-392-1928 x322

Email: drmc@ufl.edu

Sequence flanking probable Mu insertion site in UniformMu

line: 01S0557-03, Primer set: A

Class: transposon insertion site.

Location/Qualifiers

1. .14

/organism="Zea mays"

/mol_type="genomic DNA"

/strain="W22 (ACR, bz1-m9)"

/cultivar="UniformMu"

/db_xref="taxon:4577"

/clone="01S0557-03A1-G02"

/clone_lib="UniformMu MUTAIL Library"

/notes="Vector: TOPO-PCR4; DNA flanking Mu transposon
 insertions in Mu inactive lines were extracted from the
 UniformMu maize population by the thermo asymmetric
 interlaced PCR (TAIL) protocol using primers specific for
 the Mu terminal inverted repeat and a set of 16 arbitrary
 primers. Amplicons were size enriched using Sepharose 400
 spin columns and cloned into the TOPO PCR4 vector."

Query Match 68.0%; Score 6.8; DB 9; Length 14;
 Best Local Similarity 66.7%; Pred. No. 4.9e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCTGTCG 10
 : |||

Db 1 AACGGCTGC 9

RESULT 2

AJ589126/c

LOCUS

DEFINITION 17 bp DNA linear GSS 15-JAN-2004

AJ589126 Arabidopsis thaliana T-DNA flanking sequence, left border, clone

545A02, genomic survey sequence.

ACCESSION AJ589126

VERSION AJ589126.1 GI:37938750

KEYWORDS GSS; left border; T-DNA flanking sequence.

SOURCE Arabidopsis thaliana (thale cress)

ORGANISM Arabidopsis thaliana

Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;

REFERENCE

AUTHORS

TITLE

JOURNAL

MEDLINE

PUBMED

REFERENCE

AUTHORS

TITLE

JOURNAL

COMMENT

source

misc_feature

ORIGIN

Query Match

Best Local Similarity

Matches

QY

Db

RESULT 3

AL043208/c

LOCUS

DEFINITION

ACCESSION

VERSION

KEYWORDS

SOURCE

ORGANISM

REFERENCE

AUTHORS

TITLE

JOURNAL

COMMENT

FEATURES

source

misc_feature

ORIGIN

Query Match

Best Local Similarity

Matches

QY

Db

RESULT 3

AL043208/c

LOCUS

DEFINITION

ACCESSION

VERSION

KEYWORDS

SOURCE

ORGANISM

REFERENCE

AUTHORS

TITLE

JOURNAL

COMMENT

FEATURES

source

misc_feature

ORIGIN

Query Match

Best Local Similarity

Matches

Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
 rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsia.

1 Brunaud, V., Balzergue, S., Dubreucq, B., Aubourg, S., Samson, F.,
 Chauvin, S., Bechtold, N., Cruaud, C., DeRose, R., Pelletier, G.,
 Lepiniec, L., Caboche, M. and Lecharny, A.

T-DNA integration into the Arabidopsis genome depends on sequences
 of pre-insertion sites

EMBO Rep. 3 (12), 1152-1157 (2002)

22363535

12446565

2 (bases 1 to 17)

Balzergue, S.

Direct Submission

Submitted (23-OCT-2003) Balzergue S., UMRGV, INRA/CNRS, 2 rue

Gaston Cremieux, 91057 Evry cedex, FRANCE

PCR was performed on DNA from transformants of Arabidopsis thaliana

plants from INRA (Versailles). The DNA fragment(s) resulting from

the PCR were directly sequenced from the left or the right border

to determine the genomic sequence flanking the insertion. T-DNA

derived sequences were removed. Information to order the

corresponding mutant line and a link to a database providing a

graphical display of the insertion site are available at

http://dbsgap.versailles.inra.fr/publiclines/. This sequence has

been generated in the framework of the French plant genomics

program 'Genoplante' (http://www.genoplante.com and

http://genoplante-info.inbio.gen.fr).

Location/Qualifiers

1. .17

/organism="Arabidopsis thaliana"

/mol_type="genomic DNA"

/cultivar="Wassilewskija"

/db_xref="taxon:3702"

/clone="545A02"

/clone_lib="Arabidopsis thaliana T-DNA insertion lines"

1. .17

/note="T-DNA flanking sequence

left border"

Query Match 68.0%; Score 6.8; DB 9; Length 17;
 Best Local Similarity 66.7%; Pred. No. 4.8e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCTGTCG 10
 : |||

Db 17 TACCGCTGC 9

RESULT 3

AL043208/c

LOCUS

DEFINITION DKFZp434H2423_r1_434 (synonym: hteas3) Homo sapiens cDNA clone

DKFZp434H2423, mRNA sequence.

ACCESSION AL043208

VERSION AL043208.1 GI:49682496

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 20)

Blum, H., Bauersachs, S., Mewes, H.W., Gassenhuber, J. and Wiemann, S.

EST (Blum, et al.)

Unpublished (1999)

Contact: MIPS

MIPS

Ingolstaedter Landstr. 1, D-85764 Neuherberg, Germany.

Location/Qualifiers

1. .20

/organism="Homo sapiens"

/mol_type="mRNA"

/db_xref="taxon:9606"

```

/clone="DKFZp434H2423"
/tissue_type="testis"
/dev_stage="adult"
/lab_host="DH10B"
/clone_lib="434 (synonym: htes3)"
/notes="vector: pSport1; Site_1: NotI; Site_2: SalI"

ORIGIN

Query Match      68.0%; Score 6.8; DB 1; Length 20;
Best Local Similarity 66.7%; Pred. No. 4.8e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
   : |||||
Db 11 GACCGGTCG 3

RESULT 4
AZ863356/c
LOCUS
DEFINITION
  2M0171N17F Mouse 10kb plasmid UUGC1M library Mus musculus genomic
  clone UUGC2M0171N17 F, genomic survey sequence.
ACCESSION
  AZ863356
VERSION
  AZ863356.1 GI:13061409
KEYWORDS
  GSS.
SOURCE
  Mus musculus (house mouse)
ORGANISM
  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
  Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
  1 (bases 1 to 21)
REFERENCE
  1 Dunn,D., Aoyagi,A., Barber,M., Beacorn,T., Duval,B., Hamil,C.,
    Islam,H., Longacre,S., Mahmoud,M., Meenen,E., Pedersen,T.,
    Reilly,M., Rose,R., Rose,R., Stokes,R., Tingey,A., von
    Niederhausern,A. and Wright,D., Weiss,R.
  Mouse whole genome scaffolding with paired end reads from 10kb
  plasmid inserts
JOURNAL
  Unpublished (2000)
COMMENT
  Contact: Robert B. Weiss
  University of Utah Genome Center
  University of Utah
  Rm. 308, Biomedical Polymers Research Bldg., 20 S. 2030 E., SLC, UT
  84112, USA
  Tel: 801 585 5606
  Fax: 801 585 7177
  Email: ddunn@genetics.utah.edu
  Insert Length: 10000 Std Error: 0.00
  Plate: 0171 row: N column: 17
  Seq primer: CGTGTAAACGACGGCCAGT
  Class: plasmid ends
  High quality sequence stop: 21.
  Location/Qualifiers
    1..21
      /organism="Mus musculus"
      /mol_type="genomic DNA"
      /strain="C57BL/6J"
      /db_xref="taxon:10090"
      /clone="UUGC2M0171N17"
      /sex="Male"
      /lab_host="E. Coli strain XL10-Gold, Tl-resistant, F-"
      /clone_lib="Mouse 10kb plasmid UUGC1M library"
      /note="vector: PWD42nv; Purified genomic DNA from M.
        musculus C57BL/6J (male) was obtained from the Jackson
        Laboratory Mouse DNA Resource
        (http://www.jax.org/resources/documents/dnares/). The DNA
        was hydrodynamically sheared by repeated passage through a
        0.005 inch orifice at constant velocity. The sheared DNA
        was blunt end-repaired with T4 DNA polymerase and T4
        polynucleotide kinase. Adaptor oligonucleotides were
        ligated to the blunt ends in high molar excess. The
        adaptor DNA was purified and size-selected for a 9.5 to
        10.5 kb range using preparative agarose gel
        electrophoresis. Vector DNA was prepared from a derivative
        of pWD42 [gi|4732114|gb|AF129072.1], a copy-number

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inducible derivative of plasmid R1. The vector was ligated
with adaptors complementary to the insert adaptors and
purified. The sheared, adapted mouse DNA was annealed to
adapted vector DNA, and transformed into
chemically-competent E. coli XL10-Gold (Stratagene) cells
and selected for ampicillin resistance."

ORIGIN

Query Match      68.0%; Score 6.8; DB 8; Length 21;
Best Local Similarity 66.7%; Pred. No. 4.8e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
   : |||||
Db 14 GACCGGTCG 6

RESULT 5
CA851061
LOCUS
DEFINITION
  D09F11_K11.12.ab1 cDNA Peking library 2, 4 day SCN3 Glycine max
  cDNA clone D09F11 5', mRNA sequence.
ACCESSION
  CA851061
VERSION
  CA851061.1 GI:33387854
KEYWORDS
  EST.
SOURCE
  Glycine max (soybean)
ORGANISM
  Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
  Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
  rosids; eurosids I; Fabales; Fabaceae; Papilionoideae; Phaseoleae;
  Glycine.
  1 (bases 1 to 22)
REFERENCE
  1 Alkharouf,N.W., Khan,R. and Matthews,B.F.
  Analysis of expressed sequence tags from roots of resistant soybean
  infected by the soybean cyst nematode
JOURNAL
  Unpublished (2002)
COMMENT
  Contact: Alkharouf, N.W.
  Soybean Genomics and Improvement Laboratory (SGIL)
  US Department of Agriculture (USDA), ARS, PSI
  Bldg.006, Rm 118, 10300 Baltimore Ave., Beltsville, MD 20705-2350,
  USA
  Tel: 301 504 5750
  Fax: 301 504 5728
  Email: alkharouf@ars.usda.gov.
  Location/Qualifiers
    1..22
      /organism="Glycine max"
      /mol_type="mRNA"
      /cultivar="Peking"
      /db_xref="taxon:3847"
      /clone="D09F11"
      /tissue_type="Roots"
      /dev_stage="Seedlings"
      /clone_lib="cDNA Peking library 2, 4 day SCN3"
      /notes="Vector: pBluescript SK-; cDNA clones from mRNA
        extracted from Peking roots 2 and 4 days past invasion."

ORIGIN

Query Match      68.0%; Score 6.8; DB 6; Length 22;
Best Local Similarity 66.7%; Pred. No. 4.7e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
   : |||||
Db 12 TATCGGTCG 20

RESULT 6
AJ593585
LOCUS
DEFINITION
  Arabidopsis thaliana T-DNA flanking sequence, left border, clone
  384A02, genomic survey sequence.
ACCESSION
  AJ593585

```

VERSION AJ593585.1 GI:37943209
 KEYWORDS GSS; left border; T-DNA flanking sequence.
 SOURCE Arabidopsis thaliana (thale cress)
 ORGANISM Arabidopsis thaliana
 Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsids.

REFERENCE 1
 AUTHORS Brunaud V., Balzerque S., Dubreucq B., Aubourg S., Samson F., Chauvin S., Bechtold N., Cruaud C., DeRose R., Pelletier G., Lepiniec L., Caboche M. and Lecharny A.
 TITLE T-DNA integration into the Arabidopsis genome depends on sequences of pre-insertion sites
 JOURNAL EMBO Rep. 3 (12), 1152-1157 (2002)
 MEDLINE 22363535
 PUBMED 12445565

REFERENCE 2 (bases 1 to 22)
 AUTHORS Balzerque S.
 TITLE Direct Submission
 JOURNAL Submitted (23-OCT-2003) Balzerque S., UMRGV, INRA/CNRS, 2 rue Gaston Cremieux, 91057 Evry cedex, FRANCE

COMMENT PCR was performed on DNA from transformants of Arabidopsis thaliana plants from INRA (Versailles). The DNA fragment(s) resulting from the PCR were directly sequenced from the left or the right border to determine the genomic sequence flanking the insertion. T-DNA derived sequences were removed. Information to order the corresponding mutant line and a link to a database providing a graphical display of the insertion site are available at <http://dbsgap.versailles.inra.fr/publiclines/>. This sequence has been generated in the framework of the French plant genomics program 'Genoplante' (<http://www.genoplante.com> and <http://genoplante-info.infobiogen.fr>).

FEATURES
 source
 1..22
 /organism="Arabidopsis thaliana"
 /mol_type="genomic DNA"
 /cultivar="Wassillewskija"
 /db_xref="taxon:3702"
 /clone="384A02"
 /clone_lib="Arabidopsis thaliana T-DNA insertion lines"
 misc_feature
 1..22
 /notes="T-DNA flanking sequence
 left border"

ORIGIN
 Query Match 68.0%; Score 6.8; DB 9; Length 22;
 Best Local Similarity 66.7%; Pred. No. 4.7e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 :|||:|
 Db 14 GACCGGTCG 22

RESULT 7
 TA266D03P/c
 LOCUS TA266D03P 23 bp DNA linear GSS 13-DEC-2000
 DEFINITION T. brucei sheared genomic DNA clone 266d03, forward sequence, genomic survey sequence.
 ACCESSION AL488313
 VERSION AL488313.1 GI:11864165
 KEYWORDS GSS.
 SOURCE Trypanosoma brucei
 ORGANISM Trypanosoma brucei
 Eukaryota; Euglenozoa; Kinetoplastida; Trypanosomatidae; Trypanosoma.
 REFERENCE 1 (bases 1 to 23)
 AUTHORS Hall N., Bowman S., Lennard N.J., Doggett J., Atkin R., Chillingworth C., Ormond D., Harris B., El-Sayed N., Hou L., Melville S.B., Rajandream M.A. and Barrell B.G.
 TITLE Direct Submission
 JOURNAL Submitted (10-DEC-2000) Trypanosoma brucei genome sequencing project, Sanger Centre, The Wellcome Trust Genome Campus, Hinxton,

Cambridge CB10 1SA, E-mail: barrell@sanger.ac.uk and nhl@sanger.ac.uk
 Constructed at the Institute for Genomic Research (TIGR), Rockville, MD. Genomic DNA isolated from a cloned population of Trypanosoma brucei (TREU927/4 GUTat 10.1) was mechanically sheared to give a tight size distribution (4 kb). The v + i method used for the library construction is described in detail in Smith, H. and Venter, J.C. (Making small insert libraries for whole genome shotgun sequencing projects. In Genome Sequencing: A Practical Approach, eds. M. Vaudin and B. Barrell, Oxford University Press, 1999).
 Email: nelsayed@tigr.org
 Details of T. brucei sequencing at the Sanger Centre are available at http://www.sanger.ac.uk/Projects/T_brucei/.

FEATURES
 source
 1..23
 /organism="Trypanosoma brucei"
 /mol_type="genomic DNA"
 /strain="TREU927"
 /db_xref="taxon:5691"
 /clone="266d03"

ORIGIN
 Query Match 68.0%; Score 6.8; DB 9; Length 23;
 Best Local Similarity 66.7%; Pred. No. 4.7e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 :|||:|
 Db 22 AAGCGTTCG 14

RESULT 8
 CO784722
 LOCUS BL281C A09 6-Day Axolotl Tail Blastema (6DAXBL) Ambystoma mexicanum
 DEFINITION cDNA 57 similar to hypothetical protein, mRNA sequence.
 ACCESSION CO784722
 VERSION CO784722.1 GI:51000702
 SOURCE EST.
 ORGANISM Ambystoma mexicanum (axolotl)
 Ambystoma mexicanum
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Amphibia; Batrachia; Caudata; Salamandroidea; Ambystomatidae; Ambystoma.
 REFERENCE 1 (bases 1 to 24)
 AUTHORS Habermann B., Bebin A.G., Herklotz S., Volkmer M., Eckelt K., Pehlike K., Epperlein H.H., Schackert H.K., Wiebe G. and Tanaka E.M.
 TITLE An Ambystoma mexicanum EST sequencing project: Analysis of 17,352 expressed sequence tags from embryonic and regenerating blastema cDNA libraries
 JOURNAL Genome Biol. (2004) In press
 COMMENT Contact: Elly M. Tanaka
 Tanaka Lab
 Max Planck Institute of Molecular Cell Biology and Genetics, Dresden
 Pfotenhauserstrasse 108, 01307 Dresden, Germany
 Tel: 0049 351 210 2620
 Fax: 0049 351 210 1489
 Email: tanaka@mpi-cbg.de
 Plate: BL281C row: 09 column: A
 Seq primer: GCA CAT TAG GCC TAT TTA GGT GAC A.

FEATURES
 source
 1..24
 /organism="Ambystoma mexicanum"
 /mol_type="mRNA"
 /db_xref="taxon:8296"
 /tissue_type="Tail Blastema"
 /cell_type="regenerating tail blastema"
 /clone_lib="6-Day Axolotl Tail Blastema (6DAXBL)"
 /note="Vector: pCMVSPORT6; Site 1: NotI; Site 2: SalI;
 Unnormalized cDNA plasmid library prepared by Invitrogen.
 Size fractionated mRNA was polydt primed and cloned into

KEYWORDS
SOURCE Oryza sativa (japonica cultivar-group)
ORGANISM Oryza sativa (japonica cultivar-group)
 Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
 Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
 Ehrhartoideae; Oryzoae; Oryza.
REFERENCE 1 (bases 1 to 28)
AUTHORS Kim,J.S., Jun,K.M., Cheong,P.J., Kim,M.J., Lee,T.H., Shin,Y.C.,
 Song,S.I., Kim,J.K., Kim,Y.-K. and Nahm,B.H.
TITLE Large-scale Sequencing Analysis of Rice ESTs
JOURNAL Unpublished (2003)
COMMENT Genomics and Genetics Institute, GreenGene Biotech Inc.; Division
 of Bioscience and Bioinformatics, Myongji University
 Yongin, Kyonggi, Korea
 Tel: 82 31 330 6193
 Fax: 82 31 321 6355
 Email: bhnahm@gbio.com, bhnahm@bio.myongji.ac.kr.

FEATURES
 source
 1..28
 /organism="Oryza sativa (japonica cultivar-group)"
 /mol_type="mRNA"
 /cultivar="Nackdong"
 /db_xref="taxon:39947"
 /clone="NACL-03-A03"
 /tissue_type="callus"
 /dev_stage="proliferated callus on 2N6 media for 30 days"
 /lab_host="E.coli DH10B"
 /clone_lib="Rice callus plasmid cDNA library (NACL)"
 /notes="Vector: PCR4-TOPO; Site 1: EcoRI; mRNA was capped
 with oligoribonucleotides and then used as templates for
 RT-PCR."

ORIGIN
 Query Match 68.0%; Score 6.8; DB 7; Length 28;
 Best Local Similarity 66.7%; Pred. No. 4.7e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGKTCG 10
 : |||:
 Db 19 TAGCGTTCG 11

RESULT 12
DM545945/c
LOCUS Drosophila melanogaster flanking sequence of RS P element insertion
 P{RS3}UM-8214-3, clone library P{RS3}, genomic survey sequence.
ACCESSION AJ545945
VERSION AJ545945.1 GI:28553861
KEYWORDS GSS; genome survey sequence.
SOURCE Drosophila melanogaster (fruit fly)
ORGANISM Drosophila melanogaster
 Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
 Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
 Ephydroidea; Drosophilidae; Drosophila.
REFERENCE 1
AUTHORS Ryder,E.J., Ashburner,M., Bagunya,J., Blows,F., Bucheton,A.,
 Coulson,D., Dickson,B., Drummond,J., Glover,D., Gunton,N.,
 Hafen,E., Hall,S., Heisenberg,M., Lepesant,J.A., Maroy,P.,
 Mechler,B., O'Kane,C., Pflugfelder,G., Rasmuson-Lestander,A.,
 Reuter,G., Roote,J., Szidony,J., Wang,S., Webster,J. and
 Russell,S.
TITLE Mapping of RS P element insertions in Drosophila melanogaster for
 the DrosDel second generation deficiency kit
JOURNAL Unpublished
REFERENCE 2 (bases 1 to 28)
AUTHORS Ryder,E.J.
TITLE Direct Submission
JOURNAL Submitted (17-FEB-2003) Ryder E.J., Department of Genetics,
 University of Cambridge, Downing Street, CB2 3EH, UNITED KINGDOM
COMMENT The insertion point of the P element is before base 1 of the
 sequence. Further information about this P element insertion line

can be found at <http://www.flyseq.org.uk> and
<http://www.drosdel.org.uk>.

FEATURES
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 1..28
 /organism="Drosophila melanogaster"
 /mol_type="genomic DNA"
 /db_xref="taxon:7227"
 /chromosome="3R"
 /clone="p{RS3}UM-8214-3"
 /clone_lib="P{RS3}"
 /note="read=5' end"
 misc_feature 1..28
 /note="P element insertion in the 5' to 3' orientation"

ORIGIN
 Query Match 68.0%; Score 6.8; DB 9; Length 28;
 Best Local Similarity 66.7%; Pred. No. 4.7e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGKTCG 10
 : |||:
 Db 12 TAACGTTTCG 4

RESULT 13
CO789974
LOCUS Ambystoma mexicanum (axolotl)
DEFINITION Ambystoma mexicanum cDNA 5',
 similar to hypothetical protein, mRNA sequence.
ACCESSION CO789974
VERSION CO789974.1 GI:51005945
KEYWORDS EST.
SOURCE Ambystoma mexicanum (axolotl)
ORGANISM Ambystoma mexicanum
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Amphibia; Batrachia; Caudata; Salamandroidea; Ambystomatidae;
 Ambystoma.
REFERENCE 1 (bases 1 to 29)
AUTHORS Habermann,B., Bebin,A.G., Herklotz,S., Volkmer,M., Eckelt,K.,
 Pehlke,K., Epperlein,H.H., Schackert,H.K., Wiebe,G. and Tanaka,E.M.
TITLE An Ambystoma mexicanum EST sequencing project: Analysis of 17,352
 expressed sequence tags from embryonic and regenerating blastema
 cDNA libraries
JOURNAL Genome Biol. (2004) In press
COMMENT Contact: Ely M. Tanaka
 Tanaka lab
 Max Planck Institute of Molecular Cell Biology and Genetics,
 Dresden
 Pflotenhauserstrasse 108, 01307 Dresden, Germany
 Tel: 0049 351 210 2620
 Fax: 0049 351 210 1489
 Email: tanaka@mpi-cbg.de
 Plate: NT008B row: 01 column: G
 Seq primer: GCA CAT TAG GCC TAT TTA GGT GAC A.
FEATURES
 source
 1..29
 /organism="Ambystoma mexicanum"
 /mol_type="mRNA"
 /db_xref="taxon:8296"
 /tissue_type="Neural Tube, Notochord, Somites"
 /cell_type="Includes Neural tube, notochord, somites"
 /dev_stage="Stage 18-22"
 /clone_lib="St18-22 Neural tube (NT)"
 /note="Vector: pCMVSPORT6; Site 1: NotI; Site 2: SalI;
 Unnormalized cDNA plasmid library prepared by Invitrogen.
 Size fractionated mRNA was polydt primed and cloned into
 NotI-SalI site of pCMVSPORT6. Bacterial host is
 ENDH10B-TONA. Average insert size is 1.5 KB.
 TAG_LIB=NT"

ORIGIN
 Query Match 68.0%; Score 6.6; DB 7; Length 29;
 Best Local Similarity 66.7%; Pred. No. 4.7e+05;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||: |||

Db 10 TACCGTTCG 18
: |||: |||

RESULT 14
BZ291261/c
LOCUS
DEFINITION BZ291261 29 bp DNA linear GSS 24-OCT-2002
SALK_120047.44.05.x Arabidopsis thaliana TDNA insertion lines
Arabidopsis thaliana genomic clone SALK_120047.44.05.x, genomic
survey sequence.

ACCESSION BZ291261
VERSION BZ291261.1 GI:24336226
KEYWORDS GSS.

SOURCE Arabidopsis thaliana (thale cress)
ORGANISM Arabidopsis thaliana

REFERENCE BZ291261 29 bp DNA linear GSS 24-OCT-2002
SALK_120047.44.05.x Arabidopsis thaliana TDNA insertion lines
Arabidopsis thaliana genomic clone SALK_120047.44.05.x, genomic
survey sequence.

AUTHORS Alonso J.M., Leisse T.J., Barajas P., Chen H., Cheuk R.,
Gadrinab C., Jeske A., Karnes M., Kim C.J., Parker H., Prednis L.,
Shinn P., Zimmerman J. and Ecker J.R.

TITLE A Sequence-Indexed Library of Insertion Mutations in the
Arabidopsis Genome

JOURNAL Unpublished (2001)
COMMENT Contact: Joseph R. Ecker
Salk Institute Genomic Analysis Laboratory (SIGNAL)
The Salk Institute for Biological Studies
10010 N. Torrey Pines Road, La Jolla, CA 92037, USA
Tel: 858 453 4100 x1752
Fax: 858 558 6379
Email: ecker@salk.edu
This is single pass sequence recovered from the left border of
TDNA. This sequence lies within an annotated exon of At4g17970.
Class: TDNA tagged.

FEATURES
source
1. .29 Location/Qualifiers
/organism="Arabidopsis thaliana"
/mol_type="genomic DNA"
/ecotype="Col-0"
/db_xref="taxon:3702"
/clone="SALK_120047.44.05.x"
/notes="PCR was performed on Arabidopsis thaliana lines
each of which contains one or more TDNA insertion
elements. The resultant fragment for each line was
directly sequenced to determine the genomic sequence at
the site of insertion. Details of the protocols used can
be found at http://signal.salk.edu/tdna_protocols.html"

ORIGIN
Query Match 68.0%; Score 6.8; DB 8; Length 29;
Best Local Similarity 66.7%; Pred. No. 4.7e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||: |||

Db 14 TACCGTTCG 6
: |||: |||

RESULT 15
BG173250
LOCUS
DEFINITION BG173250 33 bp mRNA linear EST 06-FEB-2001
602336739F1 NCI_CGAP_Mam1 Mus musculus cDNA clone IMAGE:4459953 5',
mRNA sequence.

ACCESSION BG173250
VERSION BG173250.1 GI:12679953
KEYWORDS EST.

SOURCE Mus musculus (house mouse)
ORGANISM Mus musculus

Query Match 68.0%; Score 6.8; DB 8; Length 29;
Best Local Similarity 66.7%; Pred. No. 4.7e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||: |||

Db 14 TACCGTTCG 6
: |||: |||

RESULT 16
BZ383745
LOCUS
DEFINITION BZ383745 33 bp DNA linear GSS 26-NOV-2002
SALK_134372.19.10.n Arabidopsis thaliana TDNA insertion lines
Arabidopsis thaliana genomic clone SALK_134372.19.10.n, genomic
survey sequence.

ACCESSION BZ383745
VERSION BZ383745.1 GI:25480222
KEYWORDS GSS.

SOURCE Arabidopsis thaliana (thale cress)
ORGANISM Arabidopsis thaliana

REFERENCE BZ383745 33 bp DNA linear GSS 26-NOV-2002
SALK_134372.19.10.n Arabidopsis thaliana TDNA insertion lines
Arabidopsis thaliana genomic clone SALK_134372.19.10.n, genomic
survey sequence.

AUTHORS Alonso J.M., Leisse T.J., Barajas P., Chen H., Cheuk R.,
Gadrinab C., Jeske A., Karnes M., Kim C.J., Parker H., Prednis L.,
Shinn P., Zimmerman J. and Ecker J.R.

TITLE A Sequence-Indexed Library of Insertion Mutations in the
Arabidopsis Genome

JOURNAL Unpublished (2001)
COMMENT Contact: Joseph R. Ecker
Salk Institute Genomic Analysis Laboratory (SIGNAL)
The Salk Institute for Biological Studies
10010 N. Torrey Pines Road, La Jolla, CA 92037, USA
Tel: 858 453 4100 x1752
Fax: 858 558 6379
Email: ecker@salk.edu
This is single pass sequence recovered from the left border of
TDNA. This sequence lies within an annotated exon of At5g14680.

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
NIH-MGC <http://mgc.nci.nih.gov/>.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgabs@mail.nih.gov
Tissue Procurement: Gilbert Smith, Ph.D.
CDNA Library Prepared by: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
<http://image.llnl.gov>
Plate: LLAM10260 row: m column: 10
High quality sequence stop: 19.

FEATURES
source
1. .33 Location/Qualifiers
/organism="Mus musculus"
/mol_type="mRNA"
/strain="FVB/N"
/db_xref="taxon:10090"
/clone="IMAGE:4459953"
/tissue_type="tumor, biopsy sample"
/dev_stage="3 months, virgin"
/lab_host="DH10B"
/clone_lib="NCI CGAP Mam1"
/notes="Organ: mammary; Vector: pCMV-SPORT6; Site 1: Salk;
Site 2: NotI; Cloned unidirectionally. Primer: Oligo dt.
Library constructed by Life Technologies. Investigator
providing samples: Gilbert Smith, NIH"

ORIGIN
Query Match 68.0%; Score 6.8; DB 4; Length 33;
Best Local Similarity 66.7%; Pred. No. 4.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||: |||

Db 4 GACCGTTCG 12
: |||: |||

RESULT 16
BZ383745
LOCUS
DEFINITION BZ383745 33 bp DNA linear GSS 26-NOV-2002
SALK_134372.19.10.n Arabidopsis thaliana TDNA insertion lines
Arabidopsis thaliana genomic clone SALK_134372.19.10.n, genomic
survey sequence.

ACCESSION BZ383745
VERSION BZ383745.1 GI:25480222
KEYWORDS GSS.

SOURCE Arabidopsis thaliana (thale cress)
ORGANISM Arabidopsis thaliana

REFERENCE BZ383745 33 bp DNA linear GSS 26-NOV-2002
SALK_134372.19.10.n Arabidopsis thaliana TDNA insertion lines
Arabidopsis thaliana genomic clone SALK_134372.19.10.n, genomic
survey sequence.

AUTHORS Alonso J.M., Leisse T.J., Barajas P., Chen H., Cheuk R.,
Gadrinab C., Jeske A., Karnes M., Kim C.J., Parker H., Prednis L.,
Shinn P., Zimmerman J. and Ecker J.R.

TITLE A Sequence-Indexed Library of Insertion Mutations in the
Arabidopsis Genome

JOURNAL Unpublished (2001)
COMMENT Contact: Joseph R. Ecker
Salk Institute Genomic Analysis Laboratory (SIGNAL)
The Salk Institute for Biological Studies
10010 N. Torrey Pines Road, La Jolla, CA 92037, USA
Tel: 858 453 4100 x1752
Fax: 858 558 6379
Email: ecker@salk.edu
This is single pass sequence recovered from the left border of
TDNA. This sequence lies within an annotated exon of At5g14680.

Class: TDNA tagged.
 FEATURES source Location/Qualifiers
 1. .34
 /organism="Arabidopsis thaliana"
 /mol_type="genomic DNA"
 /ecotype="Col-0"
 /db_xref="taxon:3702"
 /clone="SALK 134372.19.10.n"
 /clone_lib="Arabidopsis thaliana TDNA insertion lines"
 /notes="PCR was performed on Arabidopsis thaliana lines each of which contains one or more TDNA insertion elements. The resultant fragment for each line was directly sequenced to determine the genomic sequence at the site of insertion. Details of the protocols used can be found at http://signal.salk.edu/tdna_protocols.html"

ORIGIN
 Query Match 68.0%; Score 6.8; DB 8; Length 33;
 Best Local Similarity 66.7%; Pred. No. 4.6e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANCCKTCG 10
 : |||||
 Db 1 GATCGTTCG 9

RESULT 17
 AU258533/c
 LOCUS
 DEFINITION AU258533 3'-directed mouse cDNA library Mus musculus cDNA clone
 BED0013178 3', mRNA sequence.
 ACCESSION AU258533
 VERSION AU258533.1 GI:20324188
 KEYWORDS EST.
 SOURCE Mus musculus (house mouse)
 ORGANISM Mus musculus
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 1 (bases 1 to 34)
 Kato, K. and Matoba, R.
 Generation of expressed sequence tags from mouse brain
 Unpublished (2002)
 JOURNAL
 COMMENT Contact: Kikuya Kato
 Graduate School of Biological Sciences
 Nara Institute of Science and Technology
 8916-5 Takayama, Ikoma, Nara 630-0101, Japan
 Tel: 81-743-72-5581
 Fax: 81-743-72-5589
 Email: kkatob@bs.aist-nara.ac.jp.
 URL: <http://love2.aist-nara.ac.jp/BED/index.html>.

FEATURES source Location/Qualifiers
 1. .34
 /organism="Mus musculus"
 /mol_type="mRNA"
 /db_xref="taxon:10090"
 /clone="BED0013178"
 /tissue_type="brain"
 /clone_lib="3'-directed mouse cDNA library"

ORIGIN
 Query Match 68.0%; Score 6.8; DB 1; Length 34;
 Best Local Similarity 66.7%; Pred. No. 4.6e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANCCKTCG 10
 : |||||
 Db 27 TAGCGTTCG 19

RESULT 18
 BZ379444/c
 LOCUS
 DEFINITION SALK_113356.43.05.n Arabidopsis thaliana TDNA insertion lines

Arabidopsis thaliana genomic clone SALK_113356.43.05.n, genomic survey sequence.
 BZ379444
 BZ379444.1 GI:25471279
 GSS.
 Arabidopsis thaliana (thale cress)
 Arabidopsis thaliana
 Arabidopsis thaliana
 Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsis.
 1 (bases 1 to 34)
 Alonso, J.M., Leisse, T.J., Barajas, P., Chen, H., Cheuk, R., Gadinab, C., Jeske, A., Karnes, M., Kim, C.J., Parker, H., Prednis, L., Shinn, P., Zimmerman, J. and Ecker, J.R.
 A Sequence-Indexed Library of Insertion Mutations in the Arabidopsis Genome
 Unpublished (2001)
 Contact: Joseph R. Ecker
 Salk Institute Genomic Analysis Laboratory (SIGNAL)
 The Salk Institute for Biological Studies
 10010 N. Torrey Pines Road, La Jolla, CA 92037, USA
 Tel: 858 453 4100 x1752
 Fax: 858 558 6379
 Email: ecker@salk.edu
 This is single pass sequence recovered from the left border of TDNA. This sequence lies within 300 bases of the 5' end of At2G20560.
 Class: TDNA tagged.
 Location/Qualifiers
 1. .34
 /organism="Arabidopsis thaliana"
 /mol_type="genomic DNA"
 /ecotype="Col-0"
 /db_xref="taxon:3702"
 /clone="SALK 113356.43.05.n"
 /clone_lib="Arabidopsis thaliana TDNA insertion lines"
 /note="PCR was performed on Arabidopsis thaliana lines each of which contains one or more TDNA insertion elements. The resultant fragment for each line was directly sequenced to determine the genomic sequence at the site of insertion. Details of the protocols used can be found at http://signal.salk.edu/tdna_protocols.html"

ORIGIN
 Query Match 68.0%; Score 6.8; DB 8; Length 34;
 Best Local Similarity 66.7%; Pred. No. 4.6e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANCCKTCG 10
 : |||||
 Db 25 GACCGTTCG 17

RESULT 19
 BF784959
 LOCUS
 DEFINITION 60210922F1 NCI CGAP_Kid14 Mus musculus cDNA clone IMAGE:4239124
 5', mRNA sequence.
 ACCESSION BF784959
 VERSION BF784959.1 GI:12089995
 KEYWORDS EST.
 SOURCE Mus musculus (house mouse)
 ORGANISM Mus musculus
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 1 (bases 1 to 37)
 NIH-MGC <http://mgc.nci.nih.gov/>
 National Institutes of Health, Mammalian Gene Collection (MGC)
 Unpublished (1999)
 JOURNAL
 COMMENT Contact: Robert Strausberg, Ph.D.
 Email: cgabbs-r@mail.nih.gov
 Tissue Procurement: Jeffrey E. Green, M.D.
 cDNA Library Preparation: Life Technologies, Inc.

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
 DNA Sequencing by: Incyte Genomics, Inc.
 Clone distribution: MGC clone distribution information can be
 found through the I.M.A.G.E. Consortium/LLNL at:
<http://image.llnl.gov>
 Plate: L1AM9851 row: 1 column: 05
 High quality sequence stop: 28.
 Location/Qualifiers

FEATURES

source

1. .37
 /organism="Mus musculus"
 /mol_type="mRNA"
 /strain="FVB/N"
 /db_xref="taxon:10090"
 /clone="IMAGE:4239124"
 /lab_host="DH10B (T1 phage-resistant)"
 /clone_lib="NCI_CGAP_Kid14"
 /notes="Organ: kidney; Vector: pCMV-SPORT6; Site 1: NotI;
 Site 2: SalI; Cloned unidirectionally. Primer: Oligo dt.
 Average insert size 1.75 kb. Constructed by Life
 Technologies. Note: this is a NCI_CGAP Library. |"

ORIGIN

Query Match 68.0%; Score 6.8; DB 2; Length 37;
 Best Local Similarity 66.7%; Pred. No. 4.6e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
 : |||:
 Db 9 GAGCGGTCG 17

RESULT 20

BI658475 37 bp mRNA linear EST 12-SEP-2001
 LOCUS 603282093F1 NCI_CGAP_Mam4 Mus musculus cDNA clone IMAGE:5326558 5',
 DEFINITION mRNA sequence.

ACCESSION BI658475

VERSION BI658475.1 GI:15572711

KEYWORDS EST.

SOURCE Mus musculus (house mouse)

ORGANISM

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 1 (bases 1 to 37)

REFERENCE NIH-MGC <http://mgs.nci.nih.gov/>.

AUTHORS National Institutes of Health, Mammalian Gene Collection (MGC)

JOURNAL Unpublished (1999)

COMMENT Contact: Robert Strausberg, Ph.D.

Email: cgapbs-x@mail.nih.gov

Tissue Procurement: Lothar Hennighausen Ph.D., Priscilla Furth

Ph.D.

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC clone distribution information can be

found through the I.M.A.G.E. Consortium/LLNL at:

<http://image.llnl.gov>

Plate: L1AM11828 row: 1 column: 23

High quality sequence stop: 37.

FEATURES

source

1. .37
 /organism="Mus musculus"
 /mol_type="mRNA"
 /strain="NMRI"
 /db_xref="taxon:10090"
 /clone="IMAGE:5326558"
 /tissue_type="tumor, gross tissue"
 /dev_stage="5 months"
 /lab_host="DH10B"
 /clone_lib="NCI_CGAP Mam4"
 /notes="Organ: mammary; Vector: pCMV-SPORT6; Site 1: SalI;
 Site 2: NotI; Cloned unidirectionally. Primer: Oligo dt.
 Library constructed by Life Technologies. Investigators

ORIGIN

Query Match 68.0%; Score 6.8; DB 4; Length 37;
 Best Local Similarity 66.7%; Pred. No. 4.6e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
 : |||:
 Db 4 GAGCGGTCG 12

RESULT 21

LOCUS AQ025003

DEFINITION

AQ025003 38 bp DNA linear GSS 23-AUG-2000
 EP(2)0966 Drosophila melanogaster EP line Drosophila melanogaster
 genomic sequence recovered from 5' end of P element, genomic survey
 sequence.

ACCESSION AQ025003

VERSION AQ025003.1 GI:3265355

KEYWORDS GSS.

SOURCE Drosophila melanogaster (fruit fly)

ORGANISM

Drosophila melanogaster
 Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
 Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
 Ephydroidea; Drosophilidae; Drosophila.
 1 (bases 1 to 38)

AUTHORS Liao, G.-C., Rehm, E.J. and Rubin, G.M.

TITLE Insertion site preferences of the P transposable element in

Drosophila melanogaster

JOURNAL Proc. Natl. Acad. Sci. U.S.A. 97 (7), 3347-3351 (2000)

MEDLINE 20202638

PUBMED 10716700

COMMENT

Contact: Gerald Rubin

Berkeley Drosophila Genome Project

University of California, Berkeley

LSA Building, Berkeley, CA 94720-3200, USA

Fax: 5106433947

Email: germy@fruitfly.berkeley.edu

Sequence recovery method was inverse PCR.

Sequence orientation is forward strand relative to 5' end of P
 element

The P element insertion position is base 31 in the 38 bases. This
 insertion position refers to the first base of the 8 base target
 recognition sequence.

Class: transposon-tagged.

Location/Qualifiers

source

1. .38
 /organism="Drosophila melanogaster"
 /mol_type="genomic DNA"
 /db_xref="taxon:7227"
 /clone_lib="Drosophila melanogaster EP line"
 /note="Inverse PCR was performed on Drosophila
 melanogaster strains each of which contains a single EP
 transposable element insertion. (The generation of these
 insertion strains is described in Rorth P, Szabo K, Bailey
 A, Lavery T, Rehm J, Rubin GM, Weigmann K, Milan M, Benes
 V, Ansoorge W, Cohen SM. 1998. Systematic gain-of-function
 genetics in Drosophila. Development 6:1049-1057.) The
 resultant fragment for each strain was directly sequenced
 to determine the genomic sequence at the site of
 insertion. Details of the protocols used can be found at
http://fruitfly.berkeley.edu/p_disrupt/inverse_pcr.html."

ORIGIN

Query Match 68.0%; Score 6.8; DB 8; Length 38;
 Best Local Similarity 66.7%; Pred. No. 4.6e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

```

QY      2  DANCCKTCG 10
      :  ||:||||
Db      7  AACCGTTCG 15

RESULT 22
TAI335E03Q/c
LOCUS   T. brucei sheared genomic DNA clone 335e03, reverse sequence,
DEFINITION genomic survey sequence.
ACCESSION AL492118
VERSION   AL492118.1 GI:11868418
KEYWORDS GSS.
SOURCE   Trypanosoma brucei
ORGANISM Trypanosoma brucei
          Eukaryota; Euglenozoa; Kinetoplastida; Trypanosomatidae;
          Trypanosoma.
REFERENCE 1 (bases 1 to 38)
AUTHORS   Hall,N., Bowman,S., Lennard,N.J., Doggett,J., Atkin,R.,
          Chillingworth,C., Ormond,D., Harris,B., El-Sayed,N., Hou,L.,
          Melville,S.E., Rajandream,M.A. and Barrell,B.G.
TITLE     Direct Submission
JOURNAL   Submitted (10-DEC-2000) Trypanosoma brucei genome sequencing
          project, Sanger Centre, The Wellcome Trust Genome Campus, Hinxton,
          Cambridge CB10 1SA, E-mail: barrell@sanger.ac.uk and
          nh@sanger.ac.uk
COMMENT   Constructed at the Institute for Genomic Research (TIGR),
          Rockville, MD. Genomic DNA isolated from a cloned population of
          Trypanosoma brucei (TREU927/4 GUTat 10.1) was mechanically sheared
          to give a tight size distribution (
          4 kb). The v + i method used for the library construction is
          described in detail in Smith, H. and Venter, J.C. (Making small
          insert libraries for whole genome shotgun sequencing projects. In
          Genome sequencing: A Practical Approach, eds. M. Vaudin and B.
          Barrell, Oxford University Press, 1999).
          Email: nelsayed@tigr.org
          Details of T. brucei sequencing at the Sanger Centre are available
          at http://www.sanger.ac.uk/Projects/T_brucei/.

FEATURES             source
      source
      1..38
          /organism="Trypanosoma brucei"
          /mol_type="genomic DNA"
          /strain="TREU927"
          /db_xref="taxon:5691"
          /clone="335e03"

ORIGIN
Query Match      68.0%; Score 6.8; DB 9; Length 38;
Best Local Similarity 66.7%; Pred. No. 4.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2  DANCCKTCG 10
      :  ||:||||
Db      17  TAACGTTTCG 9

RESULT 23
CL682259/c
LOCUS   PRI0133C A09.2 - PRI0133C.BR (38) Mixed stage fosmid library of P.
DEFINITION pacificus var. California Pristionchus pacificus genomic, genomic
          survey sequence.
ACCESSION CL682259
VERSION   CL682259.1 GI:50189587
KEYWORDS GSS.
SOURCE   Pristionchus pacificus
ORGANISM Pristionchus pacificus
          Eukaryota; Metazoa; Nematoda; Chromadorea; Diplogasterida;
          Neodiplogasteridae; Pristionchus.
REFERENCE 1 (bases 1 to 38)
AUTHORS   Srinivasan,J., Otto,G.W., Kahlow,U., Geisler,R. and Sommer,R.J.
TITLE     AppaDB: an AcedB database for the nematode satellite organism
          Pristionchus pacificus

```

```

JOURNAL Nucleic Acids Res. 32 (1), D421-D422 (2004)
COMMENT Contact: Sommer RJ
          Evolutionary Biology
          Max-Planck-Institute for Developmental Biology
          Spemannstr. 37-39, Tuebingen D-72076, Germany
          Tel: 00497071601371
          Fax: 00497071601498
          Email: ralf.sommer@tuebingen.mpg.de
          This library was generated at Caltech, Pasadena, USA and end
          sequenced at Vancouver, Canada.
          Seq primer: T7
          Class: fosmid ends.
          Location/Qualifiers
              1..38
                  /organism="Pristionchus pacificus"
                  /mol_type="genomic DNA"
                  /strain="California"
                  /db_xref="taxon:54126"
                  /clone_lib="Mixed stage fosmid library of P. pacificus
                  var. California"
                  /note="Vector: pEpifos-5 Fosmid vector"

ORIGIN
Query Match      68.0%; Score 6.8; DB 9; Length 38;
Best Local Similarity 66.7%; Pred. No. 4.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2  DANCCKTCG 10
      :  ||:||||
Db      16  AAGCGGTCG 8

RESULT 24
BI658553
LOCUS   603283781F1 NCI_CGAP_Mam4 Mus musculus cDNA clone IMAGE:5327901 5',
DEFINITION mRNA sequence.
ACCESSION BI658553
VERSION   BI658553.1 GI:15572789
KEYWORDS EST.
SOURCE   Mus musculus (house mouse)
ORGANISM Mus musculus
          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
          Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
REFERENCE 1 (bases 1 to 40)
AUTHORS   NIH-MGC http://mgc.nci.nih.gov/.
TITLE     National Institutes of Health, Mammalian Gene Collection (MGC)
JOURNAL   Unpublished (1999)
COMMENT   Contact: Robert Strausberg, Ph.D.
          Email: cgabbs-r@mail.nih.gov
          Tissue Procurement: Lothar Hennighausen Ph.D., Priscilla Furth
          Ph.D.
          cDNA Library Preparation: Life Technologies, Inc.
          cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
          DNA Sequencing by: Incyte Genomics, Inc.
          Clone distribution: MGC clone distribution information can be
          found through the I.M.A.G.E. Consortium/LLNL at:
          http://image.llnl.gov
          Plate: LLAM11832 row: a column: 22
          High quality sequence stop: 37.
          Location/Qualifiers
              1..40
                  /organism="Mus musculus"
                  /mol_type="mRNA"
                  /strain="NMRI"
                  /db_xref="taxon:10090"
                  /clone="IMAGE:5327901"
                  /tissue_type="tumor, gross tissue"
                  /dev_stage="5 months"
                  /lab_host="DH10B"
                  /clone_lib="NCI CGAP Mam4"
                  /note="Organ: mammary; Vector: pCMV-SPORT6; Site 1: SalI;
                  Site 2: NotI; Cloned unidirectionally. Primer: Oligo dt.

```

Library constructed by Life Technologies. Investigators providing samples: Lothar Hennighausen/Priscilla Furch, NIH Reference for transgenic model: Li et al., Cell Growth and Differentiation 7, 3-11 (1996)."

ORIGIN
Query Match 68.0%; Score 6.8; DB 4; Length 40;
Best Local Similarity 66.7%; Pred. No. 4.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCTGTCG 10
: |||: |||

Db 11 GAGCGGTG 19
: |||: |||

RESULT 25
AJ598365
LOCUS
DEFINITION
Arabidopsis thaliana T-DNA flanking sequence, right border, clone 467A05, genomic survey sequence.

ACCESSION
AJ598365.1 GI:37947993
VERSION
GSS; right border; T-DNA flanking sequence.
KEYWORDS
Arabidopsis thaliana (thale cress)
SOURCE
Arabidopsis thaliana

ORGANISM
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsis.

REFERENCE
1
Auteurs
Brunaud V., Balzerque S., Dubreucq B., Aubourg S., Samson P., Chauvin S., Bechtold N., Cruaud C., DeRose R., Pelletier G., Lepiniec L., Caboche M. and Lecharny A.
T-DNA integration into the Arabidopsis genome depends on sequences of pre-insertion sites

TITLE
EMBO Rep. 3 (12), 1152-1157 (2002)

JOURNAL
MEDLINE
PUBMED
22363535
REFERENCE
2 (bases 1 to 40)
Auteurs
Balzerque S.

TITLE
Direct Submission
Submitted (23-OCT-2003) Balzerque S., UMRGV, INRA/CNRS, 2 rue Gaston Cremieux, 91057 Evry cedex, FRANCE

COMMENT
PCR was performed on DNA from transformants of Arabidopsis thaliana plants from INRA (Versailles). The DNA fragment(s) resulting from the PCR were directly sequenced from the left or the right border to determine the genomic sequence flanking the insertion. T-DNA derived sequences were removed. Information to order the corresponding mutant line and a link to a database providing a graphical display of the insertion site are available at <http://dbsgap.versailles.inra.fr/publiclines/>. This sequence has been generated in the framework of the French plant genomics program 'Genoplante' (<http://www.genoplante.com> and <http://genoplante-info.infobiogen.fr>).

FEATURES
source
1. .40
Location/Qualifiers
/organism="Arabidopsis thaliana"
/mol_type="genomic DNA"
/cultivar="Wassiljewskaja"
/db_xref="taxon:3702"
/clone="467A05"
misc_feature
1. .40
/notes="T-DNA flanking sequence
right border"

ORIGIN
Query Match 68.0%; Score 6.8; DB 9; Length 40;
Best Local Similarity 66.7%; Pred. No. 4.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCTGTCG 10
: |||: |||

Db 13 TATCGGTG 21
: |||: |||

RESULT 26
BX660365/c

LOCUS
DEFINITION
Arabidopsis thaliana T-DNA flanking sequence GK-653E07-022839, genomic survey sequence.
ACCESSION
BX660365
VERSION
BX660365.1 GI:37616753
KEYWORDS
GSS.
SOURCE
Arabidopsis thaliana (thale cress)
ORGANISM
Arabidopsis thaliana

Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsis.

REFERENCE
1
Auteurs
Li, Y., Rosso, M.G., Strizhov, N., Viehoveer, P. and Weisshaar, B.

TITLE
GABI-Kat SimpleSearch: a flanking sequence tag (FST) database for the identification of T-DNA insertion mutants in Arabidopsis thaliana

JOURNAL
MEDLINE
PUBMED
2275829
REFERENCE
2
Auteurs
Rosso, M.G., Li, Y., Strizhov, N., Reiss, B., Dekker, K. and Weisshaar, B.

TITLE
An Arabidopsis thaliana T-DNA mutagenized population (GABI-Kat) for flanking sequence tag-based reverse Genetics

JOURNAL
MEDLINE
PUBMED
23117147
REFERENCE
3
Auteurs
Strizhov, N., Li, Y., Rosso, M.G., Viehoveer, P., Dekker, K.A. and Weisshaar, B.

TITLE
High-throughput generation of sequence indexes from T-DNA mutagenized Arabidopsis thaliana lines

JOURNAL
PUBMED
14682050
REFERENCE
4 (bases 1 to 40)
Auteurs
Li, Y., Rosso, M.G., Strizhov, N. and Weisshaar, B.

TITLE
Direct Submission
Submitted (31-MAR-2004) Weisshaar B., Max-Planck-Institut fuer Zuechtungsforchung, Carl-von-Linne-Weg 10, Koeln, 50829, Germany

JOURNAL
COMMENT
This sequence has been recovered from the left border of the T-DNA. It indicates an insertion within the locus defined by BAC clone MZF18. Details on the protocols used for generation of the sequence are described in References 1-3. The sequences are generated at the MPI for Plant Breeding Research in the context of the GABI-Kat project. GABI-Kat is part of the German Plant Genomics program designated 'GABI'. Information on line availability can be found at: <http://www.mpiz-koeln.mpg.de/GABI-Kat/>.

FEATURES
Location/Qualifiers
1. .40
/organism="Arabidopsis thaliana"
/mol_type="genomic DNA"
/strain="Columbia 0"
/db_xref="taxon:3702"
/clone="GK-653E07-022839"
/clone_lib="Arabidopsis thaliana T-DNA insertion lines"
/scotyes="Col-0"
/notes="PCR was performed on DNA from Arabidopsis thaliana plants (T1) which were transformed with the T-DNA from vector PAC161 (GenBank accession number: AJ537514). The lines contain one or more T-DNA insertions. The DNA fragment(s) resulting from the PCR were directly sequenced to determine the genomic sequence flanking the insertion. T-DNA derived sequences were removed."

ORIGIN
Query Match 68.0%; Score 6.8; DB 9; Length 40;
Best Local Similarity 66.7%; Pred. No. 4.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||||
Db 26 AACGGTTCG 18

RESULT 27
CL523373
LOCUS
DEFINITION DAL2H04 Flanking Sequence Tag of Oryza sativa T-DNA insertion lines
Oryza sativa (japonica cultivar-group) genomic, genomic survey
sequence.
ACCESSION CL523373
VERSION CL523373.1 GI:46150173
KEYWORDS GSS.
SOURCE Oryza sativa (japonica cultivar-group)
ORGANISM Oryza sativa (japonica cultivar-group)
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
Ehrhartoideae; Oryzaceae; Oryza.
REFERENCE 1 (bases 1 to 40)
AUTHORS Sallaud,C., Gay,C., Larmande,P., Bes,M., Piffanelli,P., Piegue,B.,
Droc,G., Regad,F., Bourgeois,E., Meynard,D., Perin,C.,
Guesquiere,A., Delsen,M., Glaszmann,J.C. and Guiderdoni,E.
TITLE High throughput T-DNA insertion mutagenesis in rice: A first step
towards in silico reverse genetics
JOURNAL Plant J. (2004) In press
COMMENT Contact: Guiderdoni
UMR FIA Biotrop program
CIRAD
TA 40/03 ave Agropolis 34398 Montpellier cedex 5 FRANCE
Tel: 33467615629
Fax: 33467615605
Email: emmanuel.guiderdoni@cirad.fr
Class: TDNA tagged.
Location/Qualifiers
1. .40
/organism="Oryza sativa (japonica cultivar-group)"
/mol_type="genomic DNA"
/cultivar="Nipponbare"
/db_xref="taxon:39947"
/clone_lib="Flanking Sequence Tag of Oryza sativa T-DNA
insertion lines"
/notes="PCR was performed on DNA of primary transformants
of Oryza sativa plants. The DNA fragment(s) resulting of
PCR were directly sequenced from the left border to
determine the genomic sequence flanking the insertion.
T-DNA derived sequences were removed. Information to order
the corresponding mutant line and a link to a database
providing a graphical display is available from June 2004
at <http://genoplante-info.infobiogen.fr/oryzatagline/>.
This sequence has been generated in the framework of the
French plant genomics program Genoplante
(<http://www.genoplante.org> and
<http://genoplante-info.infobiogen.fr>)."

ORIGIN
Query Match 68.0%; Score 6.8; DB 9; Length 40;
Best Local Similarity 66.7%; Pred. No. 4.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||||
Db 24 GACCGTTCG 32

RESULT 28
AJ746715
LOCUS
DEFINITION AJ746715 muscle - muscle minus alveolar macrophage Sus scrofa cDNA
clone ap03_6_D02, mRNA sequence.
ACCESSION AJ746715
VERSION AJ746715.1 GI:49916774
KEYWORDS EST.

SOURCE Sus scrofa (pig)
ORGANISM Sus scrofa
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae; Sus.
REFERENCE 1 (bases 1 to 41)
AUTHORS Hopwood,P.A., Zhang,F., Lowden,S., Talbot,R., Burt,D., Archibald,A.
and Dixon,I.
TITLE Development of a porcine cDNA microarray
JOURNAL Unpublished (2004)
COMMENT Contact: Hopwood PA
Dept. of Preclinical Veterinary Sciences
Royal School for Veterinary Studies
Summerhall, Edinburgh, EH9 1QH, UNITED KINGDOM
Sequencing was performed by ARK Genomics. This clone is available
from ARK- Genomics, Roslin Institute, Roslin, Midlothian EH25 9PS,
UK. See www.ark-genomics.org or contact info@arkgenomics.org.

FEATURES
source
1. .41
Location/Qualifiers
/organism="Sus scrofa"
/mol_type="mRNA"
/db_xref="taxon:9823"
/clone="ap03_6_D02"
/tissue_type="muscle"
/cell_type="macrophage"
/clone_lib="muscle - muscle minus alveolar macrophage"

ORIGIN
Query Match 68.0%; Score 6.8; DB 1; Length 41;
Best Local Similarity 66.7%; Pred. No. 4.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||||
Db 5 AACGGTTCG 13

RESULT 29
BH849732/c
LOCUS BH849732.1
DEFINITION 41 bp DNA linear GSS 13-JUN-2002
SALK_070215.23.95.x Arabidopsis thaliana TDNA insertion lines
Arabidopsis thaliana genomic clone SALK_070215.23.95.x, genomic
survey sequence.
ACCESSION BH849732
VERSION BH849732.1 GI:21420603
KEYWORDS GSS.
SOURCE Arabidopsis thaliana (thale cress)
ORGANISM Arabidopsis thaliana
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsi.
REFERENCE 1 (bases 1 to 41)
AUTHORS Alonso,J.M.; Leisse,T.J.; Barajas,P.; Chen,H.; Cheuk,R.,
Gadrinab,C.; Jeske,A.; Karnes,M.; Kim,C.J.; Parker,H.; Prednis,L.,
Shinn,P.; Zimmerman,J. and Ecker,J.R.
TITLE A Sequence-Indexed Library of Insertion Mutations in the
Arabidopsis Genome
JOURNAL Unpublished (2001)
COMMENT Contact: Joseph R. Ecker
Salk Institute Genomic Analysis Laboratory (SIGNAL)
The Salk Institute for Biological Studies
10010 N. Torrey Pines Road, La Jolla, CA 92037, USA
Tel: 858 453 4100 x1752
Fax: 858 558 6379
Email: ecker@salk.edu
This is single pass sequence recovered from the left border of
TDNA. This sequence lies within an annotated exon of At2g26190.
Class: TDNA tagged.
Location/Qualifiers
1. .41
/organism="Arabidopsis thaliana"
/mol_type="genomic DNA"
/ecotype="Col-0"
/db_xref="taxon:3702"

FEATURES
source
1. .41
Location/Qualifiers
/organism="Sus scrofa"
/mol_type="mRNA"
/db_xref="taxon:9823"
/clone="ap03_6_D02"
/tissue_type="muscle"
/cell_type="macrophage"
/clone_lib="muscle - muscle minus alveolar macrophage"

```

/clone="SALK_070215.23.95.x"
/clone_lib="Arabidopsis thaliana TDNA insertion lines"
/notes="PCR was performed on Arabidopsis thaliana lines
each of which contains one or more TDNA insertion
elements. The resultant fragment for each line was
directly sequenced to determine the genomic sequence at
the site of insertion. Details of the protocols used can
be found at http://signal.salk.edu/tdna\_protocols.html"

ORIGIN
Query Match 68.0%; Score 6.8; DB 8; Length 41;
Best Local Similarity 66.7%; Pred. No. 4.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGETCG 10
Db 17 AAGCGTTCG 9

RESULT 30
LOCUS CL518209
DEFINITION Oryza sativa (japonica cultivar-group) genomic, genomic survey
sequence.
ACCESSION CL518209
VERSION CL518209.1 GI:46145009
SOURCE GSS.
ORGANISM Oryza sativa (japonica cultivar-group)
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
Ehrhartoideae; Oryzaceae; Oryza.
REFERENCE 1 (bases 1 to 41)
AUTHORS Sallaud, C., Gay, C., Larmande, P., Bee, M., Piffanelli, P., Plegu, B.,
Droc, G., Regad, F., Bourgeois, E., Meynard, D., Perin, C.,
Ghesquiere, A., Delsen, M., Glaszmann, J.C. and Guiderdoni, E.
TITLE High throughput T-DNA insertion mutagenesis in rice: A first step
towards in silico reverse genetics
JOURNAL Plant J. (2004) In press
COMMENT Contact: Guiderdoni
UMR PIA Biotrop program
CIRAD
TA 40/03 ave Agropolis 34398 Montpellier cedex 5 FRANCE
Tel: 33467615629
Fax: 33467615605
Email: emmanuel.guiderdoni@cirad.fr
Class: TDNA tagged.
FEATURES
Location/Qualifiers
source
1..41
/organism="Oryza sativa (japonica cultivar-group)"
/mol_type="genomic DNA"
/cultivar="Nipponbare"
/db_xref="taxon:39947"
/clone_lib="Flanking Sequence Tag of Oryza sativa T-DNA
insertion lines"
/notes="PCR was performed on DNA of primary transformants
of Oryza sativa plants. The DNA fragment(s) resulting of
PCR were directly sequenced from the left border to
determine the genomic sequence flanking the insertion.
T-DNA derived sequences were removed. Information to order
the corresponding mutant line and a link to a database
providing a graphical display is available from June 2004
at http://genoplante-info.infobiogen.fr/oryzatagline/.
This sequence has been generated in the framework of the
French plant genomics program Genoplante
(http://www.genoplante.org and
http://genoplante-info.infobiogen.fr)."

ORIGIN
Query Match 68.0%; Score 6.8; DB 9; Length 41;
Best Local Similarity 66.7%; Pred. No. 4.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

```

```

QY 2 DANCGETCG 10
Db 38 GAGCGGTTCG 30

RESULT 31
LOCUS CL705789/c
DEFINITION Drosophila melanogaster (fruit fly)
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
Ephydroidea; Drosophilidae; Drosophila.
REFERENCE 1 (bases 1 to 41)
AUTHORS Lewis, R., Hoskins, R., Liao, G., Mozden, N., Tsang, G., He, Y.,
Karpen, G., Bellien, H., Rubin, G. and Spradling, A.
TITLE The Berkeley Drosophila Genome Project Gene Disruption Project
JOURNAL Unpublished (2001)
COMMENT Contact: Gerald Rubin
Berkeley Drosophila Genome Project
University of California, Berkeley
LSA Building, Berkeley, CA 94720-3200, USA
Fax: 5106439947
Email: gerry@fruitfly.berkeley.edu
Sequence recovery method was inverse PCR.
Sequence orientation is forward strand relative to 5' end of P
element
The P element insertion position is base 34 in the 41 bases. This
insertion position refers to the first base of the 8 base target
recognition sequence.
Class: transposon-tagged.
Location/Qualifiers
source
1..41
/organism="Drosophila melanogaster"
/mol_type="genomic DNA"
/db_xref="taxon:7227"
/clone_lib="Drosophila melanogaster P{EPGy2} P element
insertion lines"
/notes="Inverse PCR was performed on Drosophila
melanogaster strains each of which contains one or more
P{EPGy2} P-element transposon insertion. The resultant
fragment for each strain was directly sequenced to
determine the genomic sequence at the site of insertion.
Details of the protocols used can be found at
http://www.fruitfly.org/about/methods/inverse.pcr.html."

ORIGIN
Query Match 68.0%; Score 6.8; DB 9; Length 41;
Best Local Similarity 66.7%; Pred. No. 4.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGETCG 10
Db 22 TAACGGTTCG 14

RESULT 32
LOCUS CO788022
DEFINITION NT003A_C09 St18-22 Neural tube (NT) Ambystoma mexicanum cDNA 5',
similar to hypothetical protein, mRNA sequence.
ACCESSION CO788022
VERSION CO788022.1 GI:510033993
SOURCE Ambystoma mexicanum (axolotl)
ORGANISM Ambystoma mexicanum

```


Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Amphibia; Batrachia; Caudata; Salamandroidea; Ambystomidae; Ambystoma.

REFERENCE

AUTHORS Habermann, B., Bebbin, A.G., Herklotz, S., Volkmer, M., Eckelt, K., Hehlke, K., Epperlein, H.H., Schackert, H.K., Wiebe, G. and Tanaka, E.M.
TITLE An Ambystoma mexicanum EST sequencing project: Analysis of 17,352 expressed sequence tags from embryonic and regenerating blastema cDNA libraries

JOURNAL

COMMENT Genom. Biol. (2004) In press

Contact: Ely M. Tanaka

Tanaka Lab

Max Planck Institute of Molecular Cell Biology and Genetics,

Dresden

Pfotenauerstrasse 108, 01307 Dresden, Germany

Tel: 0049 351 210 2620

Fax: 0049 351 210 1489

Email: tanaka@mpi-cbg.de

Plate: NT003A row: 09 column: C

Seq primer: GCA CAT TAG GCC TAT TTA GGT GAC A.

FEATURES

Location/Qualifiers

1..42

/organism="Ambystoma mexicanum"

/mol_type="mRNA"

/db_xref="taxon:8296"

/tissue_type="Neural Tube, Notochord, Somites"

/cell_type="Includes Neural tube, notochord, somites"

/dev_stage="Stage 18-22"

/clone_lib="St18-22 Neural tube (NT)"

/note="Vector: pCMVSPORT6; Site 1: NotI; Site 2: SalI;

Unnormalized cDNA plasmid library prepared by Invitrogen.

Size fractionated mRNA was polydT primed and cloned into

NotI-SalI site of pCMVSPORT6. Bacterial host is

EMDH10B-TONA. Average insert size is 1.5 KB.

TAG_LIB=NT"

ORIGIN

Query Match 68.0%; Score 6.8; DB 7; Length 42;

Best Local Similarity 66.7%; Pred. No. 4.6e+05;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY

2 DANCCKTGC 10

:|:|:|:|

1 TACCGGTGC 9

RESULT 33

BF114596

LOCUS

DEFINITION SWOVAFCAP48G11SK Onchocerca volvulus adult female cDNA

(SAW98MLW-OVAF) Onchocerca volvulus cDNA clone SWOVAFCAP48G11 5',

mRNA sequence.

BF114596

BF114596.1 GI:10947296

EST.

SOURCE

ORGANISM

Onchocerca volvulus

Eukaryota; Metazoa; Nematoda; Chromadorea; Spirurida; Filarioidae;

Onchocercidae; Onchocerca.

1 (bases 1 to 43)

Lizotte-Waniewski, M. and Williams, S.A.

Genes expressed in adult female stage of Onchocerca volvulus

Unpublished (1998)

Contact: Steven A. Williams

Molecular Parasitology

Smith College Department of Biological Sciences

Department of Biological Sciences, Clark Science Center, Smith

College, Northampton, MA, 01063, USA

Tel: 4135853826

Fax: 4135853786

Email: genome@smith.edu

Seq primer: pBluescript SK.

Location/Qualifiers

FEATURES

source

1..43

/organism="Onchocerca volvulus"

/mol_type="mRNA"

/db_xref="taxon:6282"

/clone="SWOVAFCAP48G11"

/sex="female"

/dev_stage="adult"

/lab_host="XL1-Blue MRF"

/clone_lib="Onchocerca volvulus adult female cDNA

(SAW98MLW-OVAF)"

/note="Vector: Lambda Uni-ZAP XR; Site 1: Eco RI; Site 2:

Xho I; Filarial nematode parasite of humans. Two adult

female worms of Onchocerca volvulus were isolated from

consenting patients and quick frozen. Adult female mRNA

was converted to double-stranded cDNA using reverse

transcriptase and oligo(dT) followed by RNase H and DNA

pol I. The library has 7 x 10E5 independent recombinants

and the average insert size is ~1100bp. The library was

constructed by Michelle Lizotte-Waniewski with worms

provided by Dr. Sara Lustigman. The library is available

from Dr. Steven A. Williams, email: genome@smith.edu."

ORIGIN

Query Match 68.0%; Score 6.8; DB 2; Length 43;

Best Local Similarity 66.7%; Pred. No. 4.5e+05;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY

2 DANCCKTGC 10

:|:|:|:|

4 TACCGGTGC 12

RESULT 34

BI830843

LOCUS

DEFINITION

603080959F1 NIH_MGC_119 Homo sapiens cDNA clone IMAGE:5172495 5',

mRNA sequence.

BI830843

BI830843.1 GI:15942393

EST.

KEYWORDS

SOURCE

ORGANISM

Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 43)

NIH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)

Unpublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: cga@bbs-r@mail.nih.gov

Tissue Procurement: Life Technologies, Inc.

cDNA Library Preparation: Life Technologies, Inc.

cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC clone distribution information can be

found through the I.M.A.G.E. Consortium/LLNL at:

http://image.llnl.gov

Plate: LLAM11429 row: f column: 16

High quality sequence start: 3

High quality sequence stop: 43.

Location/Qualifiers

FEATURES

1..43

/organism="Homo sapiens"

/mol_type="mRNA"

/db_xref="taxon:9606"

/clone="IMAGE:5172495"

/tissue_type="medulla"

/lab_host="DH10B"

/clone_lib="NIH_MGC_119"

/note="Organ: brain; Vector: pCMV-SPORT6; Site 1: NotI;

Site 2: EcoRV (destroyed); RNA source normal medulla from

anonymous male age 27. Library is oligo-dT primed and

directionally cloned (EcoRV site is destroyed upon

cloning). Average insert size 1.3 kb, insert size range 0.9-3 kb. Library is normalized and enriched for full-length clones and was constructed by C. Gruber (Invitrogen). Research Genetics tracking code 013. Note: this is a NIH_MGC Library."

ORIGIN
Query Match 68.0%; Score 6.8; DB 4; Length 43;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
Qy 2 DANGKCTCG 10
: |||||
Db 6 GAGCGGTGCG 14

RESULT 35
AL949027/c
LOCUS
DEFINITION Arabidopsis thaliana T-DNA flanking sequence GK-317C11-015854,
Genomic survey sequence.
ACCESSION AL949027
VERSION AL949027.1 GI:24405649
KEYWORDS GSS.
SOURCE Arabidopsis thaliana (thale cress)
ORGANISM Arabidopsis thaliana

REFERENCE
AUTHORS Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
TITLE Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsis.

Li, Y., Rosso, M.G., Strizhov, N., Viehoever, P. and Weishaar, B.
GABI-Kat Simplesearch: a flanking sequence tag (FST) database for
the identification of T-DNA insertion mutants in Arabidopsis
thaliana
BIOINFORMATICS 19 (11), 1441-1442 (2003)
JOURNAL MEDLINE 22755829
PUBMED 12874060

REFERENCE
AUTHORS Rosso, M.G., Li, Y., Strizhov, N., Reiss, B., Dekker, K. and
Weishaar, B.
TITLE An Arabidopsis thaliana T-DNA mutagenized population (GABI-Kat) for
flanking sequence tag-based reverse genetics
JOURNAL Plant Mol. Biol. 53 (1-2), 247-259 (2003)
MEDLINE 23117147
PUBMED 14756321

REFERENCE
AUTHORS Strizhov, N., Li, Y., Rosso, M.G., Viehoever, P., Dekker, K.A. and
Weishaar, B.
TITLE High-throughput generation of sequence indexes from T-DNA
mutagenized Arabidopsis thaliana lines
JOURNAL Biotechniques 35 (6), 1164-1168 (2003)
PUBMED 14682050

REFERENCE
AUTHORS Rosso, M.G., Li, Y., Strizhov, N. and Weishaar, B.
TITLE Direct Submission
JOURNAL Submitted (31-MAR-2004) Weishaar B., Max-Planck-Institut fuer
Zuechtungsforchung, Carl-von-Linne-Weg 10, Koeln, 50829, Germany

COMMENT This sequence has been recovered from the left border of the T-DNA.
It indicates an insertion within the locus defined by BAC clone
F15H11. Details on the protocols used for generation of the
sequence are described in References 1-3. The sequences are
generated at the MPI for Plant Breeding Research in the context of
the GABI-Kat project. GABI-Kat is part of the German Plant Genomics
program designated 'GABI'. Information on line availability can be
found at: <http://www.mpiz-koeln.mpg.de/GABI-Kat/>.

FEATURES
source
1. .43
/organism="Arabidopsis thaliana"
/mol_type="genomic DNA"
/strain="Columbia 0"
/db_xref="taxon:3702"
/clone_lib="Arabidopsis thaliana T-DNA insertion lines"

/ecotype="Col-0"
/note="PCR was performed on DNA from Arabidopsis thaliana
plants (Ti) which were transformed with the T-DNA from
vector pAC161 (GenBank accession number: AJ537514). The
lines contain one or more T-DNA insertions. The DNA
fragment(s) resulting from the PCR were directly sequenced
to determine the genomic sequence flanking the insertion.
T-DNA derived sequences were removed."

ORIGIN
Query Match 68.0%; Score 6.8; DB 9; Length 43;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
Qy 2 DANGKCTCG 10
: |||||
Db 34 TATCGGTGCG 26

RESULT 36
CD746851
LOCUS
DEFINITION S12_D08_S12_063.abi Sugar-fed (S) An.gam. 30 hr Abdomen Library
Anopheles gambiae CDNA 5', mRNA sequence.
ACCESSION CD746851
VERSION CD746851.1 GI:49251047
KEYWORDS EST.
SOURCE Anopheles gambiae (African malaria mosquito)
ORGANISM Anopheles gambiae

Eukaryota; Metazoa; Arthropoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Nematocera; Culicoides;
Anopheles.
REFERENCE
AUTHORS Dana, A.N., Lobo, N.F., Hillemeier, M.E. and Collins, F.H.
TITLE Hematophagy-associated gene expression patterns in adult female
JOURNAL Anopheles gambiae mosquitoes
COMMENT Unpublished (2003)
Contact: Dana A.N.
Frank H. Collins Laboratory
University of Notre Dame
Center for Tropical Disease Research and Training, Dept. of Biol.
Sci., Notre Dame, IN 46556, USA
Tel: 574 - 631 - 3241
Fax: 574 - 631 - 3996
Email: adana@nd.edu

PCR Primers
FORWARD: ctcggaagcgccattgtgttg
BACKWARD: atagactactatagcggaattggc
Seq primer: ctcggaagcgccattgtgttg.
FEATURES
source
1. .44
/organism="Anopheles gambiae"
/mol_type="mRNA"
/strain="4Arr"
/db_xref="taxon:7165"
/sex="female"
/tissue_type="Abdomens"
/dev_stage="Female adult 5-7 days post eclosion"
/lab_host="E. coli XLI-Blue"
/clone_lib="Sugar-fed (S) An.gam. 30 hr Abdomen Library"
/note="Vector: lambdaTriplex2 (Clontech); Site 1: Sfi IA;
Site 2: Sfi IB; Sugar-fed adult female An. gambiae
mosquitoes were flash frozen after a 30 hour incubation of
adult mosquitoes at 19 degrees Celsius. Total RNA
extracted from abdomens separated from remaining carcasses.
CDNA inserts >500 bp cloned directionally into ltripleX2.
Sfi IA site is 5'. Non-normalized and Non-amplified
phagemid library. Single pass sequencing reactions from 5'
end."

ORIGIN
Query Match 68.0%; Score 6.8; DB 6; Length 44;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;

```

Matches      6; Conservative      2; Mismatches      1; Indels      0; Gaps      0;

QY      2  DANCGKTCG 10
      : |||||
Db      19  TATCGTTCG 27

RESULT 37
BH862329/c
LOCUS      BH862329          44 bp      DNA      linear      GSS 05-AUG-2002
DEFINITION SALK_089365 Arabidopsis thaliana TDNA insertion lines Arabidopsis
            thaliana genomic clone SALK_089365, genomic survey sequence.
ACCESSION      BH862329
VERSION      BH862329.1 GI:22097655
KEYWORDS      GSS.
SOURCE      Arabidopsis thaliana (thale cress)
ORGANISM      Arabidopsis thaliana
            Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
            Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
            rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsis.
REFERENCE      1 (bases 1 to 44)
AUTHORS      Alonso,J.M., Leisse,T.J., Barajas,P., Chen,H., Cheuk,R.,
            Gadrinab,C., Jeske,A., Karnes,M., Kim,C.J., Parker,H., Prednis,L.,
            Shinn,P., Zimmermann,J. and Ecker,J.R.
            A Sequence-Indexed Library of Insertion Mutations in the
            Arabidopsis Genome
            Unpublished (2001)
            Contact: Joseph R. Ecker
            Salk Institute Genomic Analysis Laboratory (SIGnAL)
            The Salk Institute for Biological Studies
            10010 N. Torrey Pines Road, La Jolla, CA 92037, USA
            Tel: 858 558 6379
            Fax: 858 558 6379
            Email: ecker@salk.edu
            This is single pass sequence recovered from the left border of
            TDNA. This sequence lies within an annotated exon of Atlg19840.
            Class: TDNA tagged.
FEATURES      Location/Qualifiers
            source      1..44
            /organism="Arabidopsis thaliana"
            /mol_type="genomic DNA"
            /ecotype="Col-0"
            /db_xref="taxon:3702"
            /clone="SALK_089365"
            /clone_lib="Arabidopsis thaliana TDNA insertion lines"
            /note="PCR was performed on Arabidopsis thaliana lines
            each of which contains one or more TDNA insertion
            elements. The resultant fragment for each line was
            directly sequenced to determine the genomic sequence at
            the site of insertion. Details of the protocols used can
            be found at http://signal.salk.edu/tdna_protocols.html"
ORIGIN
Query Match      68.0%; Score 6.8; DB 8; Length 44;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches      6; Conservative      2; Mismatches      1; Indels      0; Gaps      0;

QY      2  DANCGKTCG 10
      : |||||
Db      18  TAGCGGTTCG 10

RESULT 38
BZ384007
LOCUS      BZ384007          44 bp      DNA      linear      GSS 26-NOV-2002
DEFINITION SALK_134916.16.65.x Arabidopsis thaliana TDNA insertion lines
            Arabidopsis thaliana genomic clone SALK_134916.16.65.x, genomic
            survey sequence.
ACCESSION      BZ384007
VERSION      BZ384007.1 GI:25480865
KEYWORDS      GSS.
SOURCE      Arabidopsis thaliana (thale cress)
ORGANISM      Arabidopsis thaliana
            Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
            Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
            rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsis.
            1 (bases 1 to 44)
            Alonso,J.M., Leisse,T.J., Barajas,P., Chen,H., Cheuk,R.,
            Gadrinab,C., Jeske,A., Karnes,M., Kim,C.J., Parker,H., Prednis,L.,
            Shinn,P., Zimmermann,J. and Ecker,J.R.
            A Sequence-Indexed Library of Insertion Mutations in the
            Arabidopsis Genome
            Unpublished (2001)
            Contact: Joseph R. Ecker
            Salk Institute Genomic Analysis Laboratory (SIGnAL)
            The Salk Institute for Biological Studies
            10010 N. Torrey Pines Road, La Jolla, CA 92037, USA
            Tel: 858 558 6379
            Fax: 858 558 6379
            Email: ecker@salk.edu

```

```

REFERENCE
AUTHORS      Alonso,J.M., Leisse,T.J., Barajas,P., Chen,H., Cheuk,R.,
            Gadrinab,C., Jeske,A., Karnes,M., Kim,C.J., Parker,H., Prednis,L.,
            Shinn,P., Zimmermann,J. and Ecker,J.R.
            A Sequence-Indexed Library of Insertion Mutations in the
            Arabidopsis Genome
            Unpublished (2001)
            Contact: Joseph R. Ecker
            Salk Institute Genomic Analysis Laboratory (SIGnAL)
            The Salk Institute for Biological Studies
            10010 N. Torrey Pines Road, La Jolla, CA 92037, USA
            Tel: 858 558 6379
            Fax: 858 558 6379
            Email: ecker@salk.edu
            This is single pass sequence recovered from the left border of
            TDNA. This sequence lies within an annotated exon of At5g14680.
            Class: TDNA tagged.
FEATURES      Location/Qualifiers
            source      1..44
            /organism="Arabidopsis thaliana"
            /mol_type="genomic DNA"
            /ecotype="Col-0"
            /db_xref="taxon:3702"
            /clone="SALK_134916.16.65.x"
            /clone_lib="Arabidopsis thaliana TDNA insertion lines"
            /note="PCR was performed on Arabidopsis thaliana lines
            each of which contains one or more TDNA insertion
            elements. The resultant fragment for each line was
            directly sequenced to determine the genomic sequence at
            the site of insertion. Details of the protocols used can
            be found at http://signal.salk.edu/tdna_protocols.html"
ORIGIN
Query Match      68.0%; Score 6.8; DB 8; Length 44;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches      6; Conservative      2; Mismatches      1; Indels      0; Gaps      0;

QY      2  DANCGKTCG 10
      : |||||
Db      21  GATCGTTCG 29

RESULT 39
BZ763112
LOCUS      BZ763112          44 bp      DNA      linear      GSS 13-MAR-2003
DEFINITION SALK_113490.32.00.x Arabidopsis thaliana TDNA insertion lines
            Arabidopsis thaliana genomic clone SALK_113490.32.00.x, genomic
            survey sequence.
ACCESSION      BZ763112
VERSION      BZ763112.1 GI:28935665
KEYWORDS      GSS.
SOURCE      Arabidopsis thaliana (thale cress)
ORGANISM      Arabidopsis thaliana
            Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
            Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
            rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsis.
            1 (bases 1 to 44)
            Alonso,J.M., Leisse,T.J., Barajas,P., Chen,H., Cheuk,R.,
            Gadrinab,C., Jeske,A., Karnes,M., Kim,C.J., Parker,H., Prednis,L.,
            Shinn,P., Zimmermann,J. and Ecker,J.R.
            A Sequence-Indexed Library of Insertion Mutations in the
            Arabidopsis Genome
            Unpublished (2001)
            Contact: Joseph R. Ecker
            Salk Institute Genomic Analysis Laboratory (SIGnAL)
            The Salk Institute for Biological Studies
            10010 N. Torrey Pines Road, La Jolla, CA 92037, USA
            Tel: 858 558 6379
            Fax: 858 558 6379
            Email: ecker@salk.edu

```

This is single pass sequence recovered from the left border of TDNA. This sequence lies within an annotated exon of At3g48320. Class: TDNA tagged.

FEATURES

```

source
1. .44
/organism="Arabidopsis thaliana"
/mol_type="genomic DNA"
/db_xref="taxon:3702"
/clone_lib="SALK 113490.32.00.x"
/note="PCR was performed on Arabidopsis thaliana lines each of which contains one or more TDNA insertion elements. The resultant fragment for each line was directly sequenced to determine the genomic sequence at the site of insertion. Details of the protocols used can be found at http://signal.salk.edu/tdna_protocols.html"

```

ORIGIN

```

Query Match      68.0%; Score 6.8; DB 8; Length 44;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

```

QY 2 DANCCKTCG 10

Db 2 AACCGTCG 10

RESULT 40

AJ622569

LOCUS

```

DEFINITION Drosophila melanogaster flanking sequence of RS P element insertion
P[RS5]5-HA-2912, clone library P[RS5], genomic survey sequence.

```

ACCESSION

AJ622569

VERSION

GSS; genome survey sequence.

KEYWORDS

Drosophila melanogaster

SOURCE

Eukaryota; Metazoa; Arthropoda; Insecta; Pterygota; Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha; Ephydroidea; Drosophilidae; Drosophila.

REFERENCE

1

Ryder, E.J., Ashburner, M., Bagunya, J., Blows, F., Bucheton, A., Coulson, D., Dickson, B., Drummond, J., Glover, D., Gunton, N., Hafen, E., Hall, S., Heisenberg, M., Lepesant, J.A., Maroy, P., Mechler, B., O'Kane, C., Pflugfelder, G., Rasmuson-Lestander, A., Reuter, G., Roote, J., Szidonyi, J., Wang, S., Webster, J. and Russell, S.

Mapping of RS P element insertions in Drosophila melanogaster for the Drosdel second generation deficiency kit

Unpublished

2 (bases 1 to 44)

Ryder, E.J.

TITLE

Direct Submission

Submitted (19-JAN-2004)

University of Cambridge, Downing Street, CB23BH, UNITED KINGDOM

The insertion point of the P element is before base 1 of the sequence. Further information about this P element insertion line can be found at <http://www.flyseq.org.uk> and <http://www.drosdel.org.uk>.

Location/Qualifiers

1. .44

/organism="Drosophila melanogaster"

/mol_type="genomic DNA"

/db_xref="taxon:7227"

/chromosome="3R"

/clone_lib="P[RS5]5-HA-2912"

/note="read=5' end"

misc_feature

1. .44

/note="P element insertion in the 3' to 5' orientation"

ORIGIN

Query Match

Best Local Similarity 66.7%;

Pred. No. 4.5e+05;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

Db 32 AACGGTTCG 40

RESULT 41

BX001971

LOCUS

DEFINITION Arabidopsis thaliana T-DNA flanking sequence GK-360D04-016880, genomic survey sequence.

ACCESSION BX001971

VERSION BX001971.1

KEYWORDS GSS; Arabidopsis thaliana (thale cress)

SOURCE

Arabidopsis thaliana

Arabidopsis thaliana

Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosids; eutrosids II; Brassicales; Brassicaceae; Arabidopsis.

REFERENCE

1

Li, Y., Rosso, M.G., Strizhov, N., Viehoever, P. and Weisshaar, B.

GABI-Kat SimpleSearch: a flanking sequence tag (FST) database for the identification of T-DNA insertion mutants in Arabidopsis thaliana

Bioinformatics 19 (11), 1441-1442 (2003)

JOURNAL

MEDLINE

PUBMED

REFERENCE

2

Rosso, M.G., Li, Y., Strizhov, N., Reiss, B., Dekker, K. and Weisshaar, B.

An Arabidopsis thaliana T-DNA mutagenized population (GABI-Kat) for flanking sequence tag-based reverse genetics

Plant Mol. Biol. 53 (1-2), 247-259 (2003)

JOURNAL

MEDLINE

PUBMED

REFERENCE

3

Strizhov, N., Li, Y., Rosso, M.G., Viehoever, P., Dekker, K.A. and Weisshaar, B.

High-throughput generation of sequence indexes from T-DNA mutagenized Arabidopsis thaliana lines

BioTechniques 35 (6), 1164-1168 (2003)

JOURNAL

PUBMED

REFERENCE

4

Rosso, M.G., Li, Y., Strizhov, N. and Weisshaar, B.

Direct Submission

Submitted (31-MAR-2004)

Weisshaar, B., Max-Planck-Institut fuer Zuechtungsforschung, Carl-von-Linne-Weg 10, Koeln, 50829, Germany

This sequence has been recovered from the left border of the T-DNA. It indicates an insertion within the locus defined by BAC clone MAB16. Details on the protocols used for generation of the sequence are described in References 1-3. The sequences are generated at the MPI for Plant Breeding Research in the context of the GABI-Kat project. GABI-Kat is part of the German Plant Genomics program designated 'GABI'. Information on line availability can be found at: <http://www.mpiz-koeln.mpg.de/GABI-Kat/>.

Location/Qualifiers

1. .44

/organism="Arabidopsis thaliana"

/mol_type="genomic DNA"

/strain="Columbia 0"

/db_xref="taxon:3702"

/clone_lib="Arabidopsis thaliana T-DNA insertion lines"

/ecotype="Col-0"

/note="PCR was performed on DNA from Arabidopsis thaliana plants (T1) which were transformed with the T-DNA from vector pAC161 (Genbank accession number: AJ537514). The lines contain one or more T-DNA insertions. The DNA fragment(s) resulting from the PCR were directly sequenced to determine the genomic sequence flanking the insertion.

FEATURES

source

1. .44

/organism="Arabidopsis thaliana"

/mol_type="genomic DNA"

/strain="Columbia 0"

/db_xref="taxon:3702"

/clone_lib="Arabidopsis thaliana T-DNA insertion lines"

/ecotype="Col-0"

/note="PCR was performed on DNA from Arabidopsis thaliana plants (T1) which were transformed with the T-DNA from vector pAC161 (Genbank accession number: AJ537514). The lines contain one or more T-DNA insertions. The DNA fragment(s) resulting from the PCR were directly sequenced to determine the genomic sequence flanking the insertion.

T-DNA derived sequences were removed."

```

ORIGIN
Query Match          68.0%; Score 6.8; DB 9; Length 44;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY  2  DANCCKTCG 10
    :|||:|
Db   32  AAGCGGTCG 40

RESULT 42
CC883620
LOCUS
DEFINITION
  SALK_095315.31.60.x Arabidopsis thaliana TDNA insertion lines
  Arabidopsis thaliana genomic clone SALK_095315.31.60.x, genomic
  survey sequence.
ACCESSION
  CC883620.1 GI:33359976
KEYWORDS
  GSS:
SOURCE
  Arabidopsis thaliana (thale cress)
ORGANISM
  Arabidopsis thaliana
  Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
  Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
  rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsis.
REFERENCE
  1 (bases 1 to 44)
AUTHORS
  Alonso,J.M., Leisse,T.J., Barajas,P., Chen,H., Cheuk,R.,
  Gadrinab,C., Jeske,A., Karnes,M., Kim,C.J., Parker,H., Prednis,L.,
  Shinn,P., Zimmerman,J. and Ecker,J.R.
TITLE
  A Sequence-Indexed Library of Insertion Mutations in the
  Arabidopsis Genome
JOURNAL
  Unpublished (2001)
COMMENT
  Contact: Joseph R. Ecker
  Salk Institute Genomic Analysis Laboratory (SIGNAL)
  The Salk Institute for Biological Studies
  10010 N. Torrey Pines Road, La Jolla, CA 92037, USA
  Tel: 858 453 4100 x1752
  Fax: 858 558 6379
  Email: ecker@salk.edu
  This is single pass sequence recovered from the left border of
  TDNA.
Class: TDNA tagged.
Location/Qualifiers
  1. .44
  /organism="Arabidopsis thaliana"
  /mol_type="genomic DNA"
  /ecotype="Col-0"
  /db_xref="taxon:3702"
  /clone="SALK_095315.31.60.x"
  /clone_lib="Arabidopsis thaliana TDNA insertion lines"
  /note="PCR was performed on Arabidopsis thaliana lines
  each of which contains one or more TDNA insertion
  elements. The resultant fragment for each line was
  directly sequenced to determine the genomic sequence at
  the site of insertion. Details of the protocols used can
  be found at http://signal.salk.edu/tdna_protocols.html"

ORIGIN
Query Match          68.0%; Score 6.8; DB 9; Length 44;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY  2  DANCCKTCG 10
    :|||:|
Db   15  GATCGGTCG 23

RESULT 43
BZ384047
LOCUS
DEFINITION
  SALK_134987.17.15.x Arabidopsis thaliana TDNA insertion lines
  Arabidopsis thaliana genomic clone SALK_134987.17.15.x, genomic
  survey sequence.
ACCESSION
  BZ384047.1 GI:25480947
KEYWORDS
  GSS:
SOURCE
  Arabidopsis thaliana (thale cress)
ORGANISM
  Arabidopsis thaliana
  Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
  Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
  rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsis.
REFERENCE
  1 (bases 1 to 45)
AUTHORS
  Alonso,J.M., Leisse,T.J., Barajas,P., Chen,H., Cheuk,R.,
  Gadrinab,C., Jeske,A., Karnes,M., Kim,C.J., Parker,H., Prednis,L.,
  Shinn,P., Zimmerman,J. and Ecker,J.R.
TITLE
  A Sequence-Indexed Library of Insertion Mutations in the
  Arabidopsis Genome
JOURNAL
  Unpublished (2001)
COMMENT
  Contact: Joseph R. Ecker
  Salk Institute Genomic Analysis Laboratory (SIGNAL)
  The Salk Institute for Biological Studies
  10010 N. Torrey Pines Road, La Jolla, CA 92037, USA
  Tel: 858 453 4100 x1752
  Fax: 858 558 6379
  Email: ecker@salk.edu
  This is single pass sequence recovered from the left border of
  TDNA. This sequence lies within an annotated exon of At5g14680.
Class: TDNA tagged.
Location/Qualifiers
  1. .45
  /organism="Arabidopsis thaliana"
  /mol_type="genomic DNA"
  /ecotype="Col-0"
  /db_xref="taxon:3702"
  /clone="SALK_134987.17.15.x"
  /clone_lib="Arabidopsis thaliana TDNA insertion lines"
  /note="PCR was performed on Arabidopsis thaliana lines
  each of which contains one or more TDNA insertion
  elements. The resultant fragment for each line was
  directly sequenced to determine the genomic sequence at
  the site of insertion. Details of the protocols used can
  be found at http://signal.salk.edu/tdna_protocols.html"

ORIGIN
Query Match          68.0%; Score 6.8; DB 8; Length 45;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY  2  DANCCKTCG 10
    :|||:|
Db   15  TATCGGTCG 23

RESULT 44
CF304811
LOCUS
DEFINITION
  ABF1--06-A03.g1 ABF3-overexpressing transgenic rice lambda phage
  CDNA library (ABF1) Oryza sativa (japonica cultivar-group) CDNA
  clone ABF1--06-A03, mRNA sequence.
ACCESSION
  CF304811
VERSION
  CF304811.1 GI:33676572
KEYWORDS
  EST.
SOURCE
  Oryza sativa (japonica cultivar-group)
ORGANISM
  Oryza sativa (japonica cultivar-group)
  Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
  Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
  Ehrhartoideae; Oryzaceae; Oryza.
REFERENCE
  1 (bases 1 to 46)
AUTHORS
  Kim,J.S., Jun,K.M., Cheong,P.J., Kim,M.J., Lee,T.H., Shin,Y.C.,
  Song,S.I., Kim,J.K., Kim,Y.-K. and Nahm,B.H.
TITLE
  Large-scale Sequencing Analysis of Rice ESTs
JOURNAL
  Unpublished (2003)
COMMENT
  Contact: Nahm B.H.
  Genomics and Genetics Institute, GreenGene Biotech Inc.; Division
  of Bioscience and Bioinformatics, Myongji University

```

Yongin, Kyeonggi, Korea
Tel: 82 31 330 6193
Fax: 82 31 321 6355
Email: bnhnm@gbio.com, bnhnm@bio.myongji.ac.kr.

FEATURES

source

1. .46
/organism="Oryza sativa (japonica cultivar-group)"
/mol_type="mRNA"
/cultivar="Nackdong"
/db_xref="taxon:39947"
/clone="ABF1--06-A03"
/tissue_type="leaf"
/dev_stage="14 days after germination"
/lab_host="E.coli SOLR"
/clone_lib="ABF3-overexpressing transgenic rice lambda
phage cDNA library (ABF1)"
/note="Vector: pBluescript SK(+); Site 1: EcoRI; Site 2:
XhoI; Leaf was dried for 2hrs. cDNA was inserted into
lambda Uni-ZAP XR vector at 5' end with EcoRI and 3' end
with XhoI site. mRNA was prepared from ABA-responsive
element binding transcription factor 3 overexpression
line."

ORIGIN

Query Match 68.0%; Score 6.8; DB 7; Length 46;
Best Local Similarity 66.7%; Pred. NO. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGETCG 10

:|||||

Db 20 GAACGTTCG 28

RESULT 45

CF304811/c

LOCUS

DEFINITION

CF304811 46 bp mRNA linear EST 15-AUG-2003
ABF1--06-A03.g1 ABF3-overexpressing transgenic rice lambda phage
cDNA library (ABF1) Oryza sativa (japonica cultivar-group) cDNA
clone ABF1--06-A03, mRNA sequence.

ACCESSION

CF304811

VERSION

CF304811.1

KEYWORDS

EST.

SOURCE

Oryza sativa (japonica cultivar-group)

ORGANISM

Oryza sativa (japonica cultivar-group)

Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;

Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;

Ehrhartoideae; Oryzoideae; Oryza.

REFERENCE

1 (bases 1 to 46)

AUTHORS

Kim, J.S., Jun, K.M., Cheong, P.J., Kim, M.J., Lee, T.H., Shin, Y.C.,

Song, S.I., Kim, J.K., Kim, Y.-K. and Nahm, B.H.

TITLE

Large-scale Sequencing Analysis of Rice ESTs

JOURNAL

Unpublished (2003)

COMMENT

Contact: Nahm B.H.

Genomics and Genetics Institute, GreenGene Biotech Inc.; Division

of Bioscience and Bioinformatics, Myongji University

Yongin, Kyeonggi, Korea

Tel: 82 31 330 6193

Fax: 82 31 321 6355

Email: bnhnm@gbio.com, bnhnm@bio.myongji.ac.kr.

Location/Qualifiers

1. .46

/organism="Oryza sativa (japonica cultivar-group)"

/mol_type="mRNA"

/cultivar="Nackdong"

/db_xref="taxon:39947"

/clone="ABF1--06-A03"

/tissue_type="leaf"

/dev_stage="14 days after germination"

/lab_host="E.coli SOLR"

/clone_lib="ABF3-overexpressing transgenic rice lambda
phage cDNA library (ABF1)"
/note="Vector: pBluescript SK(+); Site 1: EcoRI; Site 2:
XhoI; Leaf was dried for 2hrs. cDNA was inserted into

lambda Uni-ZAP XR vector at 5' end with EcoRI and 3' end
with XhoI site. mRNA was prepared from ABA-responsive
element binding transcription factor 3 overexpression
line."

ORIGIN

Query Match 68.0%; Score 6.8; DB 7; Length 46;
Best Local Similarity 66.7%; Pred. NO. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGETCG 10

:|||||

Db 27 GAACGTTCG 19

RESULT 46

BZ383801

LOCUS

DEFINITION

BZ383801 46 bp DNA linear GSS 26-NOV-2002
SALK_134530.17.70-n Arabidopsis thaliana TDNA insertion lines
Arabidopsis thaliana genomic clone SALK_134530.17.70.n, genomic
survey sequence.

ACCESSION

BZ383801

VERSION

BZ383801.1

KEYWORDS

GSS.

SOURCE

Arabidopsis thaliana (thale cress)

ORGANISM

Arabidopsis thaliana

Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;

Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;

Rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsi.

REFERENCE

1 (bases 1 to 46)

AUTHORS

Alonso, J.M., Leisse, T.J., Barajas, P., Chen, H., Cheuk, R.,

Gadrinab, C., Jeske, A., Karnes, M., Kim, C.J., Parker, H., Prednis, L.,

Shinn, P., Zimmerman, J. and Ecker, J.R.

TITLE

A Sequence-Indexed Library of Insertion Mutations in the

Arabidopsis Genome

Unpublished (2001)

COMMENT

Contact: Joseph R. Ecker

Salk Institute Genomic Analysis Laboratory (SIGNAL)

The Salk Institute for Biological Studies

10010 N. Torrey Pines Road, La Jolla, CA 92037, USA

Tel: 858 453 4100 x1752

Fax: 858 558 6379

Email: ecker@salk.edu

This is single pass sequence recovered from the left border of

TDNA. This sequence lies within an annotated exon of At5g14680.

Class: TDNA tagged.

FEATURES

Location/Qualifiers

1. .46

/organism="Arabidopsis thaliana"

/mol_type="genomic DNA"

/ecotype="Col-0"

/db_xref="taxon:3702"

/clone="SALK_134530.17.70.n"

/clone_lib="Arabidopsis thaliana TDNA insertion lines"

/notes="PCR was performed on Arabidopsis thaliana lines

each of which contains one or more TDNA insertion

elements. The resultant fragment for each line was

directly sequenced to determine the genomic sequence at

the site of insertion. Details of the protocols used can

be found at http://signal.salk.edu/tdna_protocols.html"

ORIGIN

Query Match 68.0%; Score 6.8; DB 8; Length 46;
Best Local Similarity 66.7%; Pred. NO. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGETCG 10

:|||||

Db 17 GATCGTTCG 25

RESULT 47

AG216853

LOCUS AG216853 46 bp DNA linear GSS 03-SEP-2002
DEFINITION Drosophila melanogaster DNA, clone:NP4651-5-1, flanking P[GawB] transposon insertion, genomic survey sequence.
ACCESSION AG216853
VERSION AG216853.1 GI:22763853
KEYWORDS GSS.
SOURCE Drosophila melanogaster (fruit fly)
ORGANISM Drosophila melanogaster
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota; Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha; Ephydroidea; Drosophiliidae; Drosophila.

REFERENCE 1
AUTHORS Hayaishi,S., Ito,K., Sado,Y., Taniguchi,M., Akimoto,A., Takeuchi,H., Aigaki,T., Matsuzaki,F., Nakagoshi,H., Tanimura,T., Ueda,R., Uemura,T., Yoshihara,M. and Goto,S.
TITLE GETDB, a database compiling expression patterns and molecular locations of a collection of Gal4 enhancer traps
JOURNAL Genesis (2002) In press
REFERENCE 2 (bases 1 to 46)
AUTHORS Hayaishi,S.
TITLE Direct Submission
JOURNAL Submitted (27-AUG-2002) Shigeo Hayaishi, RIKEN Center for Developmental Biology, Laboratory for Morphogenetic Signaling; Chuo-ku, Minatojima-minamimachi 2-2-3, Kobe, Hyogo 650-0047, Japan (E-mail:shayaishi@cdb.riken.go.jp, Tel:81-78-301-3184, Fax:81-78-301-3183)
COMMENT This clone was isolated from genomic DNA flanking an insertion of the P element vector P[GawB] of a Drosophila strain.

FEATURES
source Location/Qualifiers
1..46
/organism="Drosophila melanogaster"
/mol_type="genomic DNA"
/strain="NP4651"
/db_xref="taxon:7227"
/chromosome="2"
/map="23C3"
/clone="NP4651-5-1"
/note="flanking P[GawB] transposon insertion"

ORIGIN
Query Match 68.0%; Score 6.8; DB 9; Length 46;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGETCG 10
: |||: |||
Db 19 AATCGGTCG 27

RESULT 48
LOCUS DMES46285/c 46 bp DNA linear GSS 24-FEB-2003
DEFINITION Drosophila melanogaster flanking sequence of RS P element insertion P[RS3]CB-5707-3, clone library P[RS3], genomic survey sequence.
ACCESSION AJ546285
VERSION AJ546285.1 GI:28554291
KEYWORDS GSS; genome survey sequence.
SOURCE Drosophila melanogaster (fruit fly)
ORGANISM Drosophila melanogaster
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota; Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha; Ephydroidea; Drosophiliidae; Drosophila.

REFERENCE 1
AUTHORS Ryder,E.J., Ashburner,M., Bagunya,J., Blows,F., Bucheton,A., Coulson,D., Dickson,B., Drummond,J., Glover,D., Guntton,N., Hafen,E., Hall,S., Heisenberg,M., Lepesant,J.A., Maroy,P., Mechler,B., O'Kane,C., Pflugfelder,G., Rasmussen-Lestander,A., Reuter,G., Roote,J., Szidonya,J., Wang,S., Webster,J. and Russell,S.
TITLE Mapping of RS P element insertions in Drosophila melanogaster for the Drosophil second generation deficiency kit
JOURNAL Unpublished
REFERENCE 2 (bases 1 to 46)

AUTHORS Ryder,E.J.
TITLE Direct Submission
JOURNAL Submitted (17-FEB-2003) Ryder E.J., Department of Genetics, University of Cambridge, Downing Street, CB2 3EH, UNITED KINGDOM
COMMENT The insertion point of the P element is before base 1 of the sequence. Further information about this P element insertion line can be found at <http://www.flyseq.org.uk> and <http://www.drosdel.org.uk>.

FEATURES
source Location/Qualifiers
1..46
/organism="Drosophila melanogaster"
/mol_type="genomic DNA"
/db_xref="taxon:7227"
/chromosome="3R"
/clone="P[RS3]CB-5707-3"
/clone_lib="P[RS3]"
/note="read=3' end"
misc_feature 1..46
/note="P element insertion in the 5' to 3' orientation"

ORIGIN
Query Match 68.0%; Score 6.8; DB 9; Length 46;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGETCG 10
: |||: |||
Db 24 AACGGTCG 16

RESULT 49
LOCUS BE534847/c 47 bp mRNA linear EST 09-AUG-2000
DEFINITION 601231985F1 NCI_CGAP_Mam6 Mus musculus cDNA clone IMAGE:395869 5', mRNA sequence.
ACCESSION BE534847
VERSION BE534847.1 GI:9763492
KEYWORDS EST.
SOURCE Mus musculus (house mouse)
ORGANISM Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

REFERENCE 1 (bases 1 to 47)
AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>.
TITLE National Institutes of Health, Mammalian Gene Collection (MGC)
JOURNAL Unpublished (1999)
COMMENT Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Jeffrey Green M.D.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: <http://image.llnl.gov>
Plate: LAM8772 row: i column: 22
High quality sequence stop: 47.

FEATURES
source Location/Qualifiers
1..47
/organism="Mus musculus"
/mol_type="mRNA"
/strain="FVB/N"
/db_xref="taxon:10090"
/clone="IMAGE:395869"
/sex="female, virgin"
/tissue type="infiltrating ductal carcinoma"
/dev stage="5 months"
/lab_host="DH10B"
/clone_lib="NCI_CGAP Mam6"
/note="Organ: mammary; Vector: pCMV-SPORT6; Site_1: SalI; Site_2: NotI; Cloned unidirectionally. Primer: Oligo dr. Library constructed by Life Technologies. Investigator providing samples: Jeffrey Green, M.D., NIH"

ORIGIN

Query Match 68.0%; Score 6.8; DB 2; Length 47;
 Best Local Similarity 66.7%; Pred. No. 4.5e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANCCKTCG 10
 Db 20 GACCGGTCG 12

RESULT 50
 H55083/c
 LOCUS
 DEFINITION CHR220022 Chromosome 22 exon Homo sapiens cDNA clone C22_33 5',
 mRNA sequence.

ACCESSION H55083
 VERSION H55083.1 GI:1107949

KEYWORDS EST.
 SOURCE Homo sapiens (human)

ORGANISM

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 47)

AUTHORS Trofatter, J.A., Long, K.R., Murrell, J.R., Stotler, C.J., Gusella, J.F.
 and Buckler, A.J.

TITLE An expression-independent catalog of genes from human chromosome 22

JOURNAL Genome Res. 5 (3), 214-224 (1995)

MEDLINE 96159527

PUBMED 8593609

COMMENT Contact: Buckler AJ

Molecular Neurogenetics Unit

Massachusetts General Hospital

Building 149, 13th St., Charlestown MA 02129

Tel: 6177249616

Fax: 6177265736

Email: buckler@helix.mgh.harvard.edu

Seq primer: T3.

Location/Qualifiers

1. .47

/organism="Homo sapiens"

/mol_type="mRNA"

/db_xref="taxon:9606"

/clone="C22_33"

/lab_host="E. coli DH5a"

/clone_lib="Chromosome 22 exon"

/note="Vector: pBluescriptIIKS+; Site 1: Sal I; Site 2:

Bam HI (destroyed); Exons were isolated from human

chromosome 22 specific cosmids using a modification of

the method of exon amplification (Proc. Natl. Acad. Sci.

USA 88:4005-4009, 1991). Amplified exons were digested

with Sal I and Bgl II and subsequently cloned into

pBluescriptIIKS+ at the Sal I and Bam HI sites."

ORIGIN

Query Match 68.0%; Score 6.8; DB 7; Length 47;
 Best Local Similarity 66.7%; Pred. No. 4.5e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 Db 38 GATCGGTCG 30

RESULT 51

A2615286

LOCUS

DEFINITION 1M044106R Mouse 10kb plasmid UUGC1M library Mus musculus genomic

clone UUGC1M044106 R, genomic survey sequence.

ACCESSION A2615286

VERSION A2615286.1 GI:11737476

KEYWORDS GSS.

SOURCE Mus musculus (house mouse)

ORGANISM

Mus musculus
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Mus.

REFERENCE

AUTHORS

1 (bases 1 to 47)

Dunn, D., Aoyagi, A., Barber, M., Beacorn, T., Duval, B., Hamil, C.,

Islam, H., Longacre, S., Mahmoud, M., Meenen, E., Pedersen, T.,

Reilly, M., Rose, R., Stokes, R., Tingey, A., von

Niederhauser, A. and Wright, D., Weiss, R.

Mouse whole genome scaffolding with paired end reads from 10kb

plasmid inserts

Unpublished (2000)

CONTACT: Robert B. Weiss

University of Utah Genome Center

University of Utah

Rm. 308, Biomedical Polymers Research Bldg., 20 S. 2030 E., SLC, UT

84112, USA

Tel: 801 585 5606

Fax: 801 585 7177

Email: dunn@genetics.utah.edu

Insert Length: 10000 Std Error: 0.00

Plate: 0444 row: I column: 06

Seq primer: CACACAGAAACAGCTATGACC

Class: plasmid ends

High quality sequence stop: 47.

Location/Qualifiers

1. .47

/organism="Mus musculus"

/mol_type="genomic DNA"

/strain="C57BL/6J"

/db_xref="taxon:10090"

/clone="UUGC1M044106"

/sex="Male"

/lab_host="E. Coli strain XL10-Gold, TI-resistant, F-"

/clone_lib="Mouse 10kb plasmid UUGC1M library"

/note="Vector: PWD42nv; Purified genomic DNA from M.

musculus C57BL/6J (male) was obtained from the Jackson

Laboratory Mouse DNA Resource

(http://www.jax.org/resources/documents/dnares/). The DNA

was hydrodynamically sheared by repeated passage through a

0.005 inch orifice at constant velocity. The sheared DNA

was blunt end-repaired with T4 DNA polymerase and T4

polynucleotide kinase. Adaptor oligonucleotides were

ligated to the blunt ends in high molar excess. The

adaptor DNA was purified and size-selected for a 9.5 to

10.5 kb range using preparative agarose gel

electrophoresis. Vector DNA was prepared from a derivative

of pWD42 (gl|4732114|gb|AF129072.1), a copy-number

inducible derivative of plasmid R1. The vector was ligated

with adaptors complementary to the insert adaptors and

purified. The sheared, adaptor mouse DNA was annealed to

adaptor vector DNA, and transformed into

chemically-competent E. coli XL10-Gold (Stratagene) cells

and selected for ampicillin resistance."

ORIGIN

Query Match 68.0%; Score 6.8; DB 8; Length 47;
 Best Local Similarity 66.7%; Pred. No. 4.5e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 Db 35 NATCGTTCG 43

RESULT 52

BH865116/c

LOCUS

DEFINITION SALK_097417 Arabidopsis thaliana TONA insertion lines Arabidopsis

thaliana genomic clone SALK_097417, genomic survey sequence.

ACCESSION BH865116

VERSION BH865116.1 GI:22101014

KEYWORDS GSS.

SOURCE Arabidopsis thaliana (thale cress)


```

ORGANISM Arabidopsis thaliana
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsids.
REFERENCE 1 (bases 1 to 47)
AUTHORS Alonso,J.M., Leisner,T.J., Barajas,P., Chen,H., Cheuk,R.,
Gadrinab,C., Jeske,A., Karnes,M., Kim,C.J., Parker,H., Prednis,L.,
Shinn,P., Zimmermann,J. and Ecker,J.R.
TITLE A Sequence-Indexed Library of Insertion Mutations in the
Arabidopsis Genome
JOURNAL Unpublished (2001)
COMMENT Contact: Joseph R. Ecker
Salk Institute Genomic Analysis Laboratory (SIGnAL)
The Salk Institute for Biological Studies
10010 N. Torrey Pines Road, La Jolla, CA 92037, USA
Tel: 858 453 4100 x1752
Fax: 858 558 6379
Email: ecker@salk.edu
This is single pass sequence recovered from the left border of
TDNA. This sequence lies within an annotated exon of At3g57980.
Class: TDNA tagged
FEATURES
    source      Location/Qualifiers
                1..47
                /organism="Arabidopsis thaliana"
                /mol_type="genomic DNA"
                /ecotype="Col-0"
                /db_xref="taxon:3702"
                /clone="SALK_097417"
                /clone_lib="Arabidopsis thaliana TDNA insertion lines"
                /notes="PCR was performed on Arabidopsis thaliana lines
                each of which contains one or more TDNA insertion
                elements. The resultant fragment for each line was
                directly sequenced to determine the genomic sequence at
                the site of insertion. Details of the protocols used can
                be found at http://signal.salk.edu/tdna_protocols.html"

ORIGIN
Query Match      68.0%; Score 6.8; DB 8; Length 47;
Best Local Similarity 66.7%; Pred. NO. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGRKTCG 10
    :|||:
Db 10 TAACGTTCG 2

RESULT 53
LOCUS BZ665531 47 bp DNA linear GSS 31-JAN-2003
DEFINITION EY00954-3prime Drosophila melanogaster P{EPgy2} P element insertion
lines Drosophila melanogaster genomic sequence recovered from 3'
end of P element, genomic survey sequence.
ACCESSION BZ665531
VERSION BZ665531.1 GI:28183314
KEYWORDS GSS.
SOURCE Drosophila melanogaster (fruit fly)
ORGANISM Drosophila melanogaster
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
Ephydroidea; Drosophilidae; Drosophila.
REFERENCE 1 (bases 1 to 47)
AUTHORS Lewis,R., Hoskins,R., Liao,G., Morzen,N., Tsang,G., He,Y.,
Karpen,G., Bellen,H., Rubin,G. and Spradling,A.
TITLE The Berkeley Drosophila Genome Project Gene Disruption Project
JOURNAL Unpublished (2001)
COMMENT Contact: Gerald Rubin
Berkeley Drosophila Genome Project
University of California, Berkeley
LSA Building, Berkeley, CA 94720-3200, USA
Fax: 5106433947
Email: gerry@fruitfly.berkeley.edu
Sequence recovery method was inverse PCR.
Sequence orientation is forward strand relative to 5' end of P

```

```

element
The P element insertion position is base 1 in the 47 bases. This
insertion position refers to the first base of the 8 base target
recognition sequence.
Class: transposon-tagged.
    Location/Qualifiers
        1..47
        /organism="Drosophila melanogaster"
        /mol_type="genomic DNA"
        /db_xref="taxon:7227"
        /clone_lib="Drosophila melanogaster P{EPgy2} P element
        insertion lines"
        /note="Inverse PCR was performed on Drosophila
        melanogaster strains each of which contains one or more
        P{EPgy2} P-element transposon insertion. The resultant
        fragment for each strain was directly sequenced to
        determine the genomic sequence at the site of insertion.
        Details of the protocols used can be found at
        http://www.fruitfly.org/about/methods/inverse.pcr.html."

ORIGIN
Query Match      68.0%; Score 6.8; DB 8; Length 47;
Best Local Similarity 66.7%; Pred. NO. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGRKTCG 10
    :|||:
Db 13 AACCGTTCG 21

RESULT 54
LOCUS CG773973 47 bp DNA linear GSS 29-OCT-2003
DEFINITION 1123015F05.1EL_Y1 1123 - RescueMu Grid L Zea mays genomic, genomic
survey sequence.
ACCESSION CG773973
VERSION CG773973.1 GI:38029528
KEYWORDS GSS.
SOURCE Zea mays
ORGANISM Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD
clade; Panicoideae; Andropogoneae; Zea.
REFERENCE 1 (bases 1 to 47)
AUTHORS Walbot,V.
TITLE Maize genomic sequences found using engineered RescueMu transposon
JOURNAL Unpublished (2001)
COMMENT Contact: Walbot V
Department of Biological Sciences
Stanford University
855 California Ave, Palo Alto, CA 94304, USA
Tel: 650 723 2227
Fax: 650 725 8221
Email: walbot@stanford.edu
Very probable ligation site of ends cut by single endonuclease.
Reverse complemented post-ligation sequence from source sequence.
Plate: 1123015 row: 7
Class: transposon-tagged.
    Location/Qualifiers
        1..47
        /organism="Zea mays"
        /mol_type="genomic DNA"
        /cultivar="mixed background W23/A188/B73/K55"
        /db_xref="taxon:4577"
        /tissue_type="leaf"
        /dev_stage="adult"
        /lab_host="DH10B"
        /clone_lib="1123 - RescueMu Grid L"
        /note="Organ: leaf; Vector: RescueMu (engineered from
        pBluescript backbone); Site: 1: BamHI, Site 2: BglII;
        RescueMu is a 4.9 kb, modified maize Mu transposon
        designed to allow plasmid rescue from total genomic DNA.
        Mu elements insert preferentially into transcription

```


units. For more information on RescueMu, go to the web site 'www.zmdb.iastate.edu' and follow the links for 'RescueMu'. Grid M was grown in Molokai in 2001. DNA was extracted from leaf strips, double digested using BamHI and BglII, and ligated to form circular plasmids. DH10B cells were transformed and then screened on LB plates with ampicillin."

ORIGIN

Query Match 68.0%; Score 6.8; DB 9; Length 47;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||||
Db 28 TACCGTTCG 20

RESULT 55

BZ582213 48 bp DNA linear GSS 17-DEC-2002
DEFINITION 3590.1_35.1.G02.2EL.Y.1 3590 - RescueMu Grid M Zea mays genomic,
genomic survey sequence.

ACCESSION BZ582213
VERSION BZ582213.1 GI:27217274
KEYWORDS GSS.

SOURCE

ORGANISM Zea mays
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACAD
clade; Panicoideae; Andropogoneae; Zea.
1 (bases 1 to 48)

REFERENCE

AUTHORS Walbot, V.
TITLE Maize genomic sequences found using engineered RescueMu transposon
JOURNAL Unpublished (2001)
COMMENT Department of Biological Sciences
Stanford University
855 California Ave, Palo Alto, CA 94304, USA
Tel: 650 723 2227
Fax: 650 725 8221
Email: walbot@stanford.edu

FEATURES

source
1..48
/organism="Zea mays"
/mol_type="genomic DNA"
/cultivar="mixed background W23/A188/B73/K55"
/db_xref="taxon:4577"
/tissue_type="leaf"
/dev_stage="adult"
/lab_host="DH10B"
/clone_lib="3590 - RescueMu Grid M"
/notes="Organ: leaf; Vector: RescueMu (engineered from pBlueScript backbone); Site 1: BamHI; Site 2: BglII; RescueMu is a 4.9 Kb, modified maize Mu transposon designed to allow plasmid rescue from total genomic DNA. Mu elements insert preferentially into transcription units. For more information on RescueMu, go to the web site 'www.zmdb.iastate.edu' and follow the links for 'RescueMu'. Grid M was grown at University of Arizona in 2001. DNA was extracted from leaf punches, double digested using BamHI and BglII, and ligated to form circular plasmids. DH10B cells were transformed and then screened on LB plates with ampicillin."

ORIGIN

Query Match 68.0%; Score 6.8; DB 8; Length 48;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY

2 DANCCKTCG 10
: |||||
Db 2 GATCGGTCG 10

RESULT 56

CC060177/c

LOCUS

DEFINITION

ACCESSION

VERSION

KEYWORDS

SOURCE

ORGANISM

REFERENCE

AUTHORS

TITLE

JOURNAL

COMMENT

FEATURES

source

ORIGIN

Query Match

Best Local Similarity

Matches

Conservative

Mismatches

Indels

Gaps

QY

Db

RESULT 57

AG197101/c

LOCUS

DEFINITION

ACCESSION

VERSION

KEYWORDS

SOURCE

ORGANISM

REFERENCE

AUTHORS

TITLE

JOURNAL

COMMENT

FEATURES

source

ORIGIN

Query Match

Best Local Similarity

Matches

Conservative

Mismatches

Indels

Gaps

QY

Db

RESULT 58

AG197101/c

LOCUS

DEFINITION

ACCESSION

VERSION

KEYWORDS

SOURCE

ORGANISM

REFERENCE

AUTHORS

TITLE

JOURNAL

COMMENT

FEATURES

source

ORIGIN

Query Match

Best Local Similarity

Matches

Conservative

Mismatches

Indels

Gaps

2 DANCCKTCG 10
: |||||
Db 2 GATCGGTCG 10

CC060177 48 bp DNA linear GSS 08-APR-2003
DEFINITION EY02776-3prime Drosophila melanogaster P{EPGy2} P element insertion
lines Drosophila melanogaster genomic sequence recovered from 3',
end of P element, genomic survey sequence.

ACCESSION CC060177.1 GI:29612173

VERSION GSS.

KEYWORDS Drosophila melanogaster (fruit fly)

SOURCE Drosophila melanogaster

ORGANISM Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
Ephydroidea; Drosophilidae; Drosophila.

REFERENCE 1 (bases 1 to 48)

AUTHORS Lewis, R., Hoskins, R., Liao, G., Mozden, N., Tsang, G., He, Y.,
Karpén, G., Bellén, H., Rubin, G. and Spradling, A.

TITLE The Berkeley Drosophila Genome Project Gene Disruption Project

JOURNAL Unpublished (2001)

COMMENT Contact: Gerald Rubin
Berkeley Drosophila Genome Project
University of California, Berkeley
LSA Building, Berkeley, CA 94720-3200, USA
Fax: 5106439947
Email: gerry@fruitfly.berkeley.edu

FEATURES

source

1..48

/organism="Drosophila melanogaster"

/mol_type="genomic DNA"

/db_xref="taxon:7227"

/clone_lib="Drosophila melanogaster P{EPGy2} P element

insertion lines"

/note="Inverse PCR was performed on Drosophila

melanogaster strains each of which contains one or more

P{EPGy2} P-element transposon insertion. The resultant

fragment for each strain was directly sequenced to

determine the genomic sequence at the site of insertion.

Details of the protocols used can be found at

http://www.fruitfly.org/about/methods/inverse.pcr.html."

ORIGIN

Query Match 68.0%; Score 6.8; DB 8; Length 48;

Best Local Similarity 66.7%; Pred. No. 4.5e+05;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

: |||||

Db 12 GATCGTTCG 4

RESULT 59

AG197101

LOCUS

DEFINITION

ACCESSION

VERSION

KEYWORDS

SOURCE

ORGANISM

REFERENCE

AUTHORS

TITLE

JOURNAL

COMMENT

FEATURES

source

1..48

/organism="Drosophila melanogaster"

/mol_type="genomic DNA"

/db_xref="taxon:7227"

/clone_lib="Drosophila melanogaster P{EPGy2} P element

insertion lines"

/note="Inverse PCR was performed on Drosophila

melanogaster strains each of which contains one or more

P{EPGy2} P-element transposon insertion. The resultant

fragment for each strain was directly sequenced to

determine the genomic sequence at the site of insertion.

Details of the protocols used can be found at

http://www.fruitfly.org/about/methods/inverse.pcr.html."

ORIGIN

Query Match 68.0%; Score 6.8; DB 8; Length 48;

Best Local Similarity 66.7%; Pred. No. 4.5e+05;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

: |||||

Db 12 GATCGTTCG 4

RESULT 60

AG197101

LOCUS

DEFINITION

ACCESSION

VERSION

KEYWORDS

SOURCE

ORGANISM

REFERENCE

AUTHORS

TITLE

JOURNAL

COMMENT

FEATURES

source

1..48

/organism="Drosophila melanogaster"

/mol_type="genomic DNA"

/db_xref="taxon:7227"

/clone_lib="Drosophila melanogaster P{EPGy2} P element

insertion lines"

/note="Inverse PCR was performed on Drosophila

melanogaster strains each of which contains one or more

P{EPGy2} P-element transposon insertion. The resultant

fragment for each strain was directly sequenced to

determine the genomic sequence at the site of insertion.

Details of the protocols used can be found at

http://www.fruitfly.org/about/methods/inverse.pcr.html."

ORIGIN

Query Match 68.0%; Score 6.8; DB 8; Length 48;

Best Local Similarity 66.7%; Pred. No. 4.5e+05;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

: |||||

Db 12 GATCGTTCG 4

RESULT 61

AG197101

LOCUS

DEFINITION

ACCESSION

VERSION

KEYWORDS

SOURCE

ORGANISM

REFERENCE

AUTHORS

TITLE

JOURNAL

COMMENT

FEATURES

source

1..48

/organism="Drosophila melanogaster"

/mol_type="genomic DNA"

/db_xref="taxon:7227"

/clone_lib="Drosophila melanogaster P{EPGy2} P element

insertion lines"

/note="Inverse PCR was performed on Drosophila

melanogaster strains each of which contains one or more

P{EPGy2} P-element transposon insertion. The resultant

fragment for each strain was directly sequenced to

determine the genomic sequence at the site of insertion.

Details of the protocols used can be found at

http://www.fruitfly.org/about/methods/inverse.pcr.html."

ORIGIN

Query Match 68.0%; Score 6.8; DB 8; Length 48;

Best Local Similarity 66.7%; Pred. No. 4.5e+05;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

: |||||

Db 12 GATCGTTCG 4

RESULT 62

AG197101

LOCUS

DEFINITION

ACCESSION

VERSION

KEYWORDS

SOURCE

ORGANISM

REFERENCE

AUTHORS

TITLE

JOURNAL

COMMENT

FEATURES

source

1..48

/organism="Drosophila melanogaster"

/mol_type="genomic DNA"

/db_xref="taxon:7227"

/clone_lib="Drosophila melanogaster P{EPGy2} P element

insertion lines"

/note="Inverse PCR was performed on Drosophila

melanogaster strains each of which contains one or more

P{EPGy2} P-element transposon insertion. The resultant

fragment for each strain was directly sequenced to

determine the genomic sequence at the site of insertion.

Details of the protocols used can be found at

http://www.fruitfly.org/about/methods/inverse.pcr.html."

ORIGIN

Query Match 68.0%; Score 6.8; DB 8; Length 48;

Best Local Similarity 66.7%; Pred. No. 4.5e+05;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Pan.

1
REFERENCE
AUTHORS
Park,H., Kim,Y., Kim,S., Han,Y., Woo,T., Park,K., Eun,C.J., Hoon,S.T., Chu,M., Kim,H., Joo,S., Kim,C., Song,W. and Yoo,H.
TITLE
BAC end sequences of Library RP-43
JOURNAL
Unpublished
REFERENCE
AUTHORS
Park,H., Kim,Y., Kim,S., Han,Y., Woo,T., Park,K., Eun,C.J., Hoon,S.T., Chu,M., Kim,H., Joo,S., Kim,C., Song,W. and Yoo,H.
TITLE
Direct Submission
JOURNAL
Submitted (07-JAN-2002) Hong-Seog Park, Korea Research Institute of Bioscience and Biotechnology (KRIBB), Genome Research Center (GRC); 52, Oun-dong, Yusong-gu, Daejeon 305-333, Korea
(E-mail:redstone@mail.krribb.re.kr, URL:http://pha.grc.krribb.re.kr/, Tel:82-42-866-7181, Fax:82-42-860-4409)
COMMENT
Clones are derived from the chimpanzee BAC library RP-43 This BAC end was generated during the R&D process and may have higher chance of clone tracking errors.
PRIMERS
Sequencing: TJ
LIBRARY
Vector : pBACe3.6
R.Site 1 : EcoRI
R.Site 2 : EcoRI
FEATURES
source
Location/Qualifiers
1. .48
/organism="Pan troglodytes"
/mol_type="genomic DNA"
/db_xref="taxon:9598"
/clone="RP43-077A23.TJ"
/sex="male"
/cell_type="lymphocytes"
/clone_lib="RP-43 Chimpanzee Male BAC Library"

ORIGIN
Query Match 68.0%; Score 6.8; DB 9; Length 48;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCGRKTCG 10
: |||||
Db 39 GAACGTTTCG 31

RESULT 58
BX285564
LOCUS
DEFINITION
Arabidopsis thaliana T-DNA flanking sequence GK-383G05-017270, genomic survey sequence.
ACCESSION
BX285564
VERSION
BX285564.1 GI:28884560
KEYWORDS
GSS.
SOURCE
Arabidopsis thaliana (thale cress)
ORGANISM
Arabidopsis thaliana
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosids; eustosids II; Brassicales; Brassicaceae; Arabidopsis.

REFERENCE
1
AUTHORS
Li,Y., Rosso,M.G., Strizhov,N., Viehoveer,P. and Weisshaar,B.
TITLE
GABI-Kat SimpleSearch: a flanking sequence tag (FST) database for the identification of T-DNA insertion mutants in Arabidopsis thaliana
Bioinformatics 19 (11), 1441-1442 (2003)
MEDLINE
22755829
PUBMED
12874060
REFERENCE
2
AUTHORS
Rosso,M.G., Li,Y., Strizhov,N., Reiss,B., Dekker,K. and Weisshaar,B.
TITLE
An Arabidopsis thaliana T-DNA mutagenized population (GABI-Kat) for flanking sequence tag-based reverse genetics
Plant Mol. Biol. 53 (1-2), 247-259 (2003)
JOURNAL
MEDLINE
23117147

14756321
3
REFERENCE
AUTHORS
Strizhov,N., Li,Y., Rosso,M.G., Viehoveer,P., Dekker,K.A. and Weisshaar,B.
TITLE
High-throughput generation of sequence indexes from T-DNA mutagenized Arabidopsis thaliana lines
BioTechniques 35 (6), 1164-1168 (2003)
JOURNAL
PUBMED
14682050
REFERENCE
4 (bases 1 to 48)
AUTHORS
Strizhov,N., Rosso,M.G., Li,Y. and Weisshaar,B.
TITLE
Direct Submission
JOURNAL
Submitted (31-MAR-2004) Weisshaar B., Max-Planck-Institut fuer Zuechtungsforschung, Carl-von-Linne-Weg 10, Koeln, 50829, Germany
COMMENT
This sequence has been recovered from the left border of the T-DNA. It indicates an insertion within the locus defined by BAC clone f15b18. Details on the protocols used for generation of the sequence are described in References 1-3. The sequences are generated at the MPI for Plant Breeding Research in the context of the GABI-Kat project. GABI-Kat is part of the German Plant Genomics program designated 'GABI'. Information on line availability can be found at: <http://www.mpiz-koeln.mpg.de/GABI-Kat/>.
FEATURES
source
Location/Qualifiers
1. .48
/organism="Arabidopsis thaliana"
/mol_type="genomic DNA"
/strain="Columbia 0"
/db_xref="taxon:3702"
/clone="GK-383G05-017270"
/ecotype="Col-0"
/note="PCR was performed on DNA from Arabidopsis thaliana plants (T1) which were transformed with the T-DNA from vector PAC161 (Genbank accession number: AJ537514). The lines contain one or more T-DNA insertions. The DNA fragment(s) resulting from the PCR were directly sequenced to determine the genomic sequence flanking the insertion. T-DNA derived sequences were removed."
ORIGIN
Query Match 68.0%; Score 6.8; DB 9; Length 48;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCGRKTCG 10
: |||||
Db 12 GAACGTTTCG 20

RESULT 59
CL521328
LOCUS
DEFINITION
Oryza sativa (japonica cultivar-group) genomic, genomic survey sequence.
ACCESSION
CL521328
VERSION
CL521328.1 GI:46148128
KEYWORDS
GSS.
SOURCE
Oryza sativa (japonica cultivar-group)
ORGANISM
Oryza sativa (japonica cultivar-group)
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; Ehrhartoideae; Oryzaceae; Oryza.
1 (bases 1 to 48)
REFERENCE
1
AUTHORS
Sallaud,C., Gay,C., Larmande,P., Bes,M., Piffanelli,P., Piegou,B., Droc,G., Regad,F., Bourgeois,E., Meynard,D., Perin,C., Chesquiere,A., Delseny,M., Glaszmann,J.C. and Guiderdoni,E.
TITLE
High throughput T-DNA insertion mutagenesis in rice: A first step towards in silico reverse genetics
Plant J. (2004) In press
JOURNAL
Contact: Guiderdoni
COMMENT
UMR PIA Biotrop program
CIRAD
TA 40/03 ave Agropolis 34398 Montpellier cedex 5 FRANCE

Tel: 33467615629
 Fax: 33467615605
 Email: emmanuel.guiderdon@cirad.fr
 Class: TDNA tagged.

FEATURES

source
 1. .48
 Location/Qualifiers
 /organism="Oryza sativa (japonica cultivar-group)"
 /mol_type="genomic DNA"
 /cultivar="Nipponbare"
 /db_xref="taxon:39947"
 /clone_lib="Flanking Sequence Tag of Oryza sativa T-DNA insertion lines"
 /note="PCR was performed on DNA of primary transformants of Oryza sativa plants. The DNA fragment(s) resulting of PCR were directly sequenced from the left border to determine the genomic sequence flanking the insertion. T-DNA derived sequences were removed. Information to order the corresponding mutant line and a link to a database providing a graphical display is available from June 2004 at <http://genoplante-info.infobiogen.fr/oryzatagline/>. This sequence has been generated in the framework of the French plant genomics program Genoplante (<http://www.genoplante.org> and <http://genoplante-info.infobiogen.fr>)."

ORIGIN

Query Match 68.0%; Score 6.8; DB 9; Length 48;
 Best Local Similarity 66.7%; Pred. No. 4.5e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGKTCG 10
 :|||:|
 Db 33 TACCGGTCTG 41

RESULT 60

AA087268/c
 LOCUS
 DEFINITION
 mol2g10.r1 Life Tech mouse embryo 10 5dpc 10665016 Mus musculus cDNA clone IMAGE:553410 5' similar to TR:G285961 G285961 mRNA ; mRNA sequence.

ACCESSION
 VERSION
 KEYWORDS
 SOURCE
 ORGANISM

AA087268 49 bp mRNA linear EST 23-OCT-1996
 Mus musculus (house mouse)
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. 1 (bases 1 to 49)
 Marra, M., Hillier, L., Allen, M., Bowles, M., Dietrich, N., Dubuque, T., Geisel, S., Kucaba, T., Lacy, M., Le, M., Martin, J., Morris, M., Schellenberg, K., Steptoe, M., Tan, F., Underwood, K., Moore, B., Theising, B., Wylie, F., Lennon, G., Soares, B., Wilson, R. and Waterston, R.
 The WashU-HMI Mouse EST Project
 Unpublished (1996)
 Contact: Marra M/Mouse EST Project
 WashU-HMI Mouse EST Project
 Washington University School of Medicine
 4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
 Tel: 314 286 1800
 Fax: 314 286 1810
 Email: mouseest@watson.wustl.edu
 This clone is available royalty-free through LNL ; contact the IMAGE Consortium (infoimage.llnl.gov) for further information.
 MGI:334202
 Possible reversed clone: similarity on wrong strand
 Seq primer: -28M13 rev1 from Amersham
 High quality sequence stop: 1.
 Location/Qualifiers

TITLE

JOURNAL
 COMMENT

FEATURES

source
 1. .49
 Location/Qualifiers
 /organism="Mus musculus"
 /mol_type="mRNA"

/strain="C57BL/6J"
 /db_xref="taxon:10090"
 /clone="IMAGE:553410"
 /tissue_type="embryo"
 /dev_stage="10.5dpc embryos"
 /lab_host="DH10B"
 /clone_lib="Life Tech mouse embryo 10 5dpc 10665016"
 /note="Organ: whole mouse; Vector: pCMV-SPORT2; Site: 1; Sali; Site: 2; NotI; Cloned unidirectionally. Primer: Oligo dT. 10.5dpc embryos. pCMV-SPORT2 vector."

ORIGIN

Query Match 68.0%; Score 6.8; DB 1; Length 49;
 Best Local Similarity 66.7%; Pred. No. 4.5e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGKTCG 10
 :|||:|
 Db 28 GACCGGTCTG 20

RESULT 61

AI900473

LOCUS

DEFINITION

AI900473 49 bp mRNA linear EST 12-JUL-2004
 sc11b08.y1 Gm-cl012 Glycine max cDNA clone GENOME SYSTEMS CLONE ID: Gm-cl012-1840 5' similar to TR:Q42077 Q42077 POLLEN SPECIFIC PROTEIN PRECURSOR ; mRNA sequence.

ACCESSION

VERSION

KEYWORDS

SOURCE

ORGANISM

AI900473.1 GI:5606439
 EST.
 Glycine max (soybean)
 Glycine max
 Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosids; eurosids I; Fabales; Fabaceae; Papilionoideae; Phaseoleae; Glycine.

REFERENCE

AUTHORS

Shoenmaker, R., Kein, P., Vodkin, L., Erpelding, J., Coryell, V., Khanna, A., Bolla, B., Marra, M., Hillier, L., Kucaba, T., Martin, J., Beck, C., Wylie, T., Underwood, K., Steptoe, M., Theising, B., Allen, M., Bowers, Y., Person, B., Swaller, T., Gibbons, M., Pape, D., Harvey, N., Schurk, R., Ritter, E., Kohn, S., Shin, T., Jackson, Y., Cardenas, M., McCann, R., Waterston, R. and Wilson, R.
 Public Soybean EST Project
 Unpublished (1999)
 Contact: Shoemaker R/Public Soybean EST Project
 Public Soybean EST Project
 Washington University School of Medicine
 4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108, USA
 Tel: 314 286 1800
 Fax: 314 286 1810
 Email: est@watson.wustl.edu
 When it has been determined, an EST from the other end of this clone is listed in the 'Other ESTs on clone' field. Trace considered overall poor quality possible reversed clone: similarity on wrong strand This clone is available through: Biogenetic Services, 801 32nd Ave. Brookings, SD 57006 USA (phone: 800 423 4163; email: info@biogeneticservices.com)
 Seq primer: -40RP from Gibco
 High quality sequence stop: 1.
 Location/Qualifiers

TITLE

JOURNAL

COMMENT

FEATURES

source
 1. .49
 Location/Qualifiers
 /organism="Glycine max"
 /mol_type="mRNA"
 /cultivar="Williams"
 /db_xref="taxon:3847"
 /clone="GENOME SYSTEMS CLONE ID: Gm-cl012-1840"
 /tissue_type="Apical shoot tips, 9-10 day old etiolated seedlings"
 /lab_host="XL10-Gold"
 /clone_lib="Gm-cl012"
 /note="Vector: pBluescript II XR; Site: 1; EcoRI; Site 2: XhoI; This cDNA library was constructed from mRNA isolated

from the apical shoots of 9 to 10 day old etiolated seedlings. The shoot tips including any emerged leaves were harvested for mRNA isolation. The cDNA library was prepared using the Stratagene pBluescript II XR cDNA library construction kit. Complementary DNA was synthesized from mRNA using a primer consisting of a poly (dT) sequence with a XhoI restriction site. EcoRI adapters were ligated to the blunt-ended cDNA fragments followed by XhoI digestion. The cDNA fragments were directionally cloned into the EcoRI-XhoI restriction site of the pBluescript vector. The ligated cDNA fragments were transformed into Xl10-Gold host cells. This library was constructed by Dr. Randy Shoemaker and Dr. John Erneling."

ORIGIN

```
Query Match      68.0%; Score 6.8; DB 1; Length 49;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
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| | | | |
|----|----|-----------|----|
| Qy | 2 | DANCGKTCG | 10 |
| | | : | : |
| | | : | : |
| | | : | : |
| Db | 25 | GAACGGTCG | 33 |

RESULT 62
BE77801
LOCUS
601463874F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3867210 5',
DEFINITION
mRNA sequence.
49 bp mRNA linear EST 20-OCT-2000

FEATURES

```

location/Qualifiers
i. .49
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:3867210"
/tissue_type="retinoblastoma"
/lab_host="DH10B (phage-resistant)"
/clone_lib="NIH_MGC_67"
/notes="Organ: eye; Vector: pCMV-SPORT6; Site 1: NotI;
Site 2: SalI; Cloned unidirectionally. Primer: Oligo dr.
Average insert size 1.75 kb. Library constructed by Life
Technologies."

```

ORIGIN

```

Query Match          68.0%; Score 6.8; DB 2; Length 49;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Caps 0;

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Qy 2 DANCCKTCG 10
:| | | | |

Db 37 GACCGGTCG 45

RESULT 63
BE778801/c

| | | | | | |
|------------|---|-------|------|--------|-----------------|
| LOCUS | BE778801 | 49 bp | mRNA | linear | EST 20-OCT-2000 |
| DEFINITION | g01463874F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3867210', mRNA sequence. | | | | |
| ACCESSION | BE778801 | | | | |
| VERSION | BE778801.1 GI:10199920 | | | | |
| KEYWORDS | EST. | | | | |

ORIGIN

| | | | | |
|-----------------------|--------|--------------------|-----------|------------|
| Query Match | 68.0% | Score 6.8; | DB 2; | Length 49; |
| Best Local Similarity | 66.7%; | Pred. No. 4.5e+05; | | |
| Matches | 6; | Mismatches 2; | Indels 0; | Gaps 0; |
| Conservative | | | | |

| | | | |
|----|----|------------|----|
| Qy | 2 | DANCGKTCG | 10 |
| | | : : : | |
| Db | 44 | GACCGGTCTG | 36 |

RESULT 64

| | | | | |
|------------|----------------|---------------|-------------------------|------------------|
| BI694186 | BI694186 | 49 bp | linear | EST 18-SEP-2001 |
| LOCUS | 603347521F1 | NCI CGAP Mam2 | Mus musculus cDNA clone | IMAGE:5375308 5' |
| DEFINITION | mRNA sequence. | | | |

```

RESULT 66
BZ383782
LOCUS
DEFINITION
    BZ383782          49 bp      DNA
    SALK_134485.18.75.n Arabidopsis thaliana TDNA insertion lines
    Arabidopsis thaliana genomic clone SALK_134485.18.75.n, genomic
    survey sequence.

ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
    Arabidopsis thaliana (thale cress)
    Arabidopsis thaliana
    Arabidopsis thaliana
    Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
    Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
    rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsis.
    1 (bases 1 to 49)

REFERENCE
AUTHORS
    Alonso,J.M., Leisse,T.J., Barajas,P., Chen,H., Cheuk,R.,
    Gadrinab,C., Jeske,A., Karnes,M., Kim,C.J., Parker,H., Prednis,L.,
    Shinn,P., Zimmerman,J. and Ecker,J.R.

TITLE
    A Sequence-Indexed Library of Insertion Mutations in the
    Arabidopsis Genome

JOURNAL
COMMENT
    Unpublished (2001)
    Contact: Joseph R. Ecker
    Salk Institute Genomic Analysis Laboratory (SIGNAL)
    The Salk Institute for Biological Studies
    10010 N. Torrey Pines Road, La Jolla, CA 92037, USA
    Tel: 858 453 4100 x1752
    Fax: 858 558 6379
    Email: ecker@salk.edu
    This is single pass sequence recovered from the left border of
    TDNA. This sequence lies within an annotated exon of AT5g14680.
    Class: TDNA tagged.
  
```

```

FEATURES
source
Location/Qualifiers
1..49
/organism="Arabidopsis thaliana"
/mol_type="genomic DNA"
/scotype="Col-0"
/db_xref="taxon:3702"
/clone="SALK_134485.18.75.n"
/clone_lib="Arabidopsis thaliana TDNA insertion lines"
/note="PCR was performed on Arabidopsis thaliana lines
each of which contains one or more TDNA insertion
elements. The resultant fragment for each line was
directly sequenced to determine the genomic sequence at
the site of insertion. Details of the protocols used can
be found at: http://signal.salk.edu/tdna\_protocols.html"

```

| | |
|-------------|--|
| RESULT | 67 |
| AJ622567/c | |
| LOCUS | |
| DEFINITION | 49 bp DNA linear GSS 28-JAN-2004 |
| DESCRIPTION | Drosophila melanogaster flanking sequence of RS P element insertion P{R5}5-HA-2901, clone library P{RS5}, genomic survey sequence. |
| ACCESSION | AJ622567 |
| VERSION | AJ622567.1 GI:41366786 |
| KEYWORDS | GSS; genome survey sequence. |
| SOURCE | Drosophila melanogaster (fruit fly) |
| ORGANISM | Drosophila melanogaster |
| | Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota; Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha; Ephydroidea; Drosophilidae; Drosophila. |
| REFERENCE | 1 |
| AUTHORS | Ryder, E.J., Ashburner, M., Bagunya, J., Blows, F., Bucheton, A., Coulson, D., Dickson, B., Drummond, J., Glover, D., Gunton, N., Hafen, E., Hall, S., Heisenberg, M., Lepesant, J.A., Maroy, P., Muller, T., Reuter, T., Schmitt, C., Steward, R., Thoenen, H., Tschopp, Y., von Arnim, U., Weisburger, K., Ziegler, W. |

Mechler,B., O'Kane,C., Pflugfelder,G., Rasmuson-Lestander,A.,
Reuter,G., Roote,J., Szidonya,J., Wang,S., Webster,J. and
Russell,S.

TITLE Mapping of RS P element insertions in Drosophila melanogaster for
the Drosdel second generation deficiency kit

JOURNAL Unpublished
REFERENCE 2 (bases 1 to 49)

AUTHORS Ryder,E.J.

TITLE Direct Submission
JOURNAL Submitted (19-JAN-2004) Ryder E.J., Department of Genetics,
University of Cambridge, Downing Street, CB23EH, UNITED KINGDOM

COMMENT The insertion point of the P element is before base 1 of the
sequence. Further information about this P element insertion line
can be found at <http://www.flyseq.org.uk> and
<http://www.drosdel.org.uk>.

FEATURES Location/Qualifiers

source 1..49
/organism="Drosophila melanogaster"
/mol_type="genomic DNA"
/db_xref="taxon:7227"
/chromosome="X"
/clone="P{RS5}5-HA-2901"
/clone_lib="P{RS5}"
/note="read=5' end"
misc_feature 1..49
/note="P element insertion in the 3' to 5' orientation"

ORIGIN

Query Match 68.0%; Score 6.8; DB 9; Length 49;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

Db :|||:|

38 GATCGTTCG 30

RESULT 68

CNS07F9C

LOCUS 49 bp DNA linear GSS 02-OCT-2001
DEFINITION Anopheles gambiae GSS T7 end of clone 06C03 of library NotreDame1
from strain PEST of Anopheles gambiae (African malaria mosquito),
genomic survey sequence.

ACCESSION AL608178

VERSION AL608178.1 GI:15914363

KEYWORDS Anopheles gambiae (African malaria mosquito)

SOURCE Anopheles gambiae

ORGANISM Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;

Neoptera; Endopterygota; Diptera; Nematocera; Culicoidea;

Anopheles.

REFERENCE 1 (bases 1 to 49)

AUTHORS Genoscope.

TITLE Direct Submission

JOURNAL Submitted (01-OCT-2001) Genoscope - Centre National de Sequencage :
BP 191 91006 EVRY cedex - FRANCE (E-mail : seqref@genoscope.cns.fr)
- Web : www.genoscope.cns.fr

REFERENCE 2 (bases 1 to 49)

AUTHORS Roth,C.W., Brey,P.T., Ke,Z. and Collins,F.H.

TITLE Direct Submission

JOURNAL Submitted (01-OCT-2001) RBMI, Institut Pasteur, 25, rue du Dr.

Roux, Paris 75015, France

COMMENT This clone is from an A. gambiae BAC library provided by F.H.

Collins and sequenced by Genoscope in collaboration with the

Laboratory of Biochem. and Biol. Molec. of Insects, Institut

Pasteur.

FEATURES Location/Qualifiers

source 1..49
/organism="Anopheles gambiae"
/mol_type="genomic DNA"
/strain="PEST"
/db_xref="taxon:7165"
/clone="06C03"

ORIGIN
/clone_lib="NotreDame1"
/note="end : T7"

Query Match 68.0%; Score 6.8; DB 9; Length 49;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

Db :|||:|

5 GACCGTTCG 13

RESULT 69

AUI02871

LOCUS 50 bp mRNA linear EST 28-JAN-2004
DEFINITION AUI02871 Sugano Homo sapiens cDNA library Homo sapiens cDNA clone
HSI02318, mRNA sequence.

ACCESSION AUI02871

VERSION AUI02871.1 GI:13552392

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

REFERENCE 1 (bases 1 to 50)
AUTHORS Suzuki,Y., Taira,H., Tsunoda,T., Mizushima-Sugano,J., Sese,J.,
Hata,H., Ota,T., Isogai,T., Tanaka,T., Morishita,S., Okubo,K.,
Sakaki,Y., Nakamura,Y., Suyama,A. and Sugano,S.

TITLE Diverse transcriptional initiation revealed by fine, large-scale

mapping of mRNA start sites

JOURNAL EMBO Rep. 2 (5), 388-393 (2001)

MEDLINE 21270072

PUBMED 11375929

COMMENT Contact: Yutaka Suzuki

Institute of Medical Science, University of Tokyo

4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan

Email: ysuzuki@ims.u-tokyo.ac.jp

Suzuki,Y., Yoshitomo-Nakagawa,K., Maruyama,K., Suyama,A. and

Sugano,S. Construction and characterization of a full

length-enriched and a 5'-end-enriched cDNA library. Gene 200 (1-2),

149-156 (1997)

FEATURES Location/Qualifiers

source 1..50
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="HSI02318"
/clone_lib="Sugano Homo sapiens cDNA library"

ORIGIN

Query Match 68.0%; Score 6.8; DB 1; Length 50;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

Db :|||:|

29 GATCGGTCG 37

RESULT 70

AUI04223

LOCUS 50 bp mRNA linear EST 28-JAN-2004
DEFINITION AUI04223 Sugano Homo sapiens cDNA library Homo sapiens cDNA clone
HEP21349, mRNA sequence.

ACCESSION AUI04223

VERSION AUI04223.1 GI:13553744

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

REFERENCE 1 (bases 1 to 50)
AUTHORS Suzuki,Y., Taira,H., Tsunoda,T., Mizushima-Sugano,J., Sese,J.,
Hata,H., Ota,T., Isogai,T., Tanaka,T., Morishita,S., Okubo,K.,
Sakaki,Y., Nakamura,Y., Suyama,A. and Sugano,S.

TITLE Diverse transcriptional initiation revealed by fine, large-scale

mapping of mRNA start sites

JOURNAL EMBO Rep. 2 (5), 388-393 (2001)

MEDLINE 21270072

PUBMED 11375929

COMMENT Contact: Yutaka Suzuki

Institute of Medical Science, University of Tokyo

4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan

Email: ysuzuki@ims.u-tokyo.ac.jp

Suzuki,Y., Yoshitomo-Nakagawa,K., Maruyama,K., Suyama,A. and

Sugano,S. Construction and characterization of a full

length-enriched and a 5'-end-enriched cDNA library. Gene 200 (1-2),

149-156 (1997)

FEATURES Location/Qualifiers

source 1..50
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="HSI02318"
/clone_lib="Sugano Homo sapiens cDNA library"

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REFERENCE
AUTHORS   Suzuki,Y., Taira,H., Tsunoda,T., Mizushima-Sugano,J., Sese,J.,
          Hata,H., Ota,T., Isogai,T., Tanaka,T., Morishita,S., Okubo,K.,
          Sakaki,Y., Nakamura,Y., Suyama,A. and Sugano,S.
TITLE     Diverse transcriptional initiation revealed by fine, large-scale
          mapping of mRNA start sites
JOURNAL   EMO Rep. 2 (5), 388-393 (2001)
MEDLINE   21270072
PUBMED    11375929
COMMENT   Contact: Yutaka Suzuki
          Department of Virology
          Institute of Medical Science, University of Tokyo
          4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan
          Email: y Suzuki@ims.u-tokyo.ac.jp
          Suzuki,Y., Yoshitomo-Nakagawa,K., Maruyama,K., Suyama,A. and
          Sugano,S. Construction and characterization of a full
          length-enriched and a 5'-end-enriched cDNA library. Gene 200 (1-2),
          149-156 (1997).
FEATURES
source    Location/Qualifiers
          1..50
          /organism="Homo sapiens"
          /mol_type="mRNA"
          /db_xref="taxon:9606"
          /clone="HEP21349"
          /clone_lib="Sugano Homo sapiens cDNA library"
ORIGIN
Query Match      68.0%; Score 6.8; DB 1; Length 50;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
Db 24 TAACGCTCG 32

RESULT 71
AUI04277
LOCUS      AUI04277 Sugano Homo sapiens cDNA library Homo sapiens cDNA clone
DEFINITION HEP20513, mRNA sequence.
ACCESSION  AUI04277.1 GI:13553798
VERSION     AUI04277.1
KEYWORDS    EST.
SOURCE      Homo sapiens (human)
ORGANISM    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.
REFERENCE   Suzuki,Y., Taira,H., Tsunoda,T., Mizushima-Sugano,J., Sese,J.,
            Hata,H., Ota,T., Isogai,T., Tanaka,T., Morishita,S., Okubo,K.,
            Sakaki,Y., Nakamura,Y., Suyama,A. and Sugano,S.
            Diverse transcriptional initiation revealed by fine, large-scale
            mapping of mRNA start sites
            EMO Rep. 2 (5), 388-393 (2001)
            149-156 (1997).
TITLE       Diverse transcriptional initiation revealed by fine, large-scale
            mapping of mRNA start sites
JOURNAL     EMO Rep. 2 (5), 388-393 (2001)
MEDLINE     21270072
PUBMED      11375929
COMMENT     Contact: Yutaka Suzuki
            Department of Virology
            Institute of Medical Science, University of Tokyo
            4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan
            Email: y Suzuki@ims.u-tokyo.ac.jp
            Suzuki,Y., Yoshitomo-Nakagawa,K., Maruyama,K., Suyama,A. and
            Sugano,S. Construction and characterization of a full
            length-enriched and a 5'-end-enriched cDNA library. Gene 200 (1-2),
            149-156 (1997).
FEATURES
source    Location/Qualifiers
          1..50
          /organism="Homo sapiens"
          /mol_type="mRNA"
          /db_xref="taxon:9606"
          /clone="HEP20513"
          /clone_lib="Sugano Homo sapiens cDNA library"

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ORIGIN
Query Match      68.0%; Score 6.8; DB 1; Length 50;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
Db 28 TAACGCTCG 36

RESULT 72
AUI04506/c
LOCUS      AUI04506 Sugano Homo sapiens cDNA library Homo sapiens cDNA clone
DEFINITION AUI04506, mRNA sequence.
ACCESSION  AUI04506
VERSION     AUI04506.1 GI:13554027
KEYWORDS    EST.
SOURCE      Homo sapiens (human)
ORGANISM    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.
REFERENCE   Suzuki,Y., Taira,H., Tsunoda,T., Mizushima-Sugano,J., Sese,J.,
            Hata,H., Ota,T., Isogai,T., Tanaka,T., Morishita,S., Okubo,K.,
            Sakaki,Y., Nakamura,Y., Suyama,A. and Sugano,S.
            Diverse transcriptional initiation revealed by fine, large-scale
            mapping of mRNA start sites
            EMO Rep. 2 (5), 388-393 (2001)
            149-156 (1997).
TITLE       Diverse transcriptional initiation revealed by fine, large-scale
            mapping of mRNA start sites
JOURNAL     EMO Rep. 2 (5), 388-393 (2001)
MEDLINE     21270072
PUBMED      11375929
COMMENT     Contact: Yutaka Suzuki
            Department of Virology
            Institute of Medical Science, University of Tokyo
            4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan
            Email: y Suzuki@ims.u-tokyo.ac.jp
            Suzuki,Y., Yoshitomo-Nakagawa,K., Maruyama,K., Suyama,A. and
            Sugano,S. Construction and characterization of a full
            length-enriched and a 5'-end-enriched cDNA library. Gene 200 (1-2),
            149-156 (1997).
FEATURES
source    Location/Qualifiers
          1..50
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          /mol_type="mRNA"
          /db_xref="taxon:9606"
          /clone="CAS06466"
          /clone_lib="Sugano Homo sapiens cDNA library"
ORIGIN
Query Match      68.0%; Score 6.8; DB 1; Length 50;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
Db 25 AAGCGCTCG 17

RESULT 73
AUI05095
LOCUS      AUI05095 Sugano Homo sapiens cDNA library Homo sapiens cDNA clone
DEFINITION HEP20564, mRNA sequence.
ACCESSION  AUI05095
VERSION     AUI05095.1 GI:13554616
KEYWORDS    EST.
SOURCE      Homo sapiens (human)
ORGANISM    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.
REFERENCE   Suzuki,Y., Taira,H., Tsunoda,T., Mizushima-Sugano,J., Sese,J.,

```

Hata,H., Ota,T., Isogai,T., Tanaka,T., Morishita,S., Okubo,K.,
Sakaki,Y., Nakamura,Y., Suyama,A. and Sugano,S.
Diverse transcriptional initiation revealed by fine, large-scale
mapping of mRNA start sites
EMBO Rep. 2 (5), 388-393 (2001)
21270072
11375929
Contact: Yutaka Suzuki
Department of Virology
Institute of Medical Science, University of Tokyo
4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan
Email: yezukui@ims.u-tokyo.ac.jp
Suzuki,Y., Yoshitomo-Nakagawa,K., Maruyama,K., Suyama,A. and
Sugano,S. Construction and characterization of a full
length-enriched and a 5'-end-enriched cDNA library. Gene 200 (1-2),
149-156 (1997).

FEATURES

source
1. .50
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="HRC20564"
/clone_lib="Sugano Homo sapiens cDNA library"

ORIGIN

Query Match 68.0%; Score 6.8; DB 1; Length 50;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||:
Db 9 GAACGGTCG 17

RESULT 74

AU105096
LOCUS
DEFINITION
AU105096 50 bp mRNA linear EST 28-JAN-2004
HRC01943, mRNA sequence.

ACCESSION
AU105096
VERSION
AU105096.1 GI:13554617
KEYWORDS
EST.
SOURCE
Homo sapiens (human)

ORGANISM

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE

AUTHORS
Suzuki,Y., Taira,H., Tsunoda,T., Mizushima-Sugano,J., Sese,J.,
Hata,H., Ota,T., Isogai,T., Tanaka,T., Morishita,S., Okubo,K.,
Sakaki,Y., Nakamura,Y., Suyama,A. and Sugano,S.
Diverse transcriptional initiation revealed by fine, large-scale
mapping of mRNA start sites

JOURNAL
MEDLINE
PUBMED
EMBO Rep. 2 (5), 388-393 (2001)
11375929
Contact: Yutaka Suzuki
Department of Virology
Institute of Medical Science, University of Tokyo
4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan
Email: yezukui@ims.u-tokyo.ac.jp

COMMENT

Suzuki,Y., Yoshitomo-Nakagawa,K., Maruyama,K., Suyama,A. and
Sugano,S. Construction and characterization of a full
length-enriched and a 5'-end-enriched cDNA library. Gene 200 (1-2),
149-156 (1997).

FEATURES

source
1. .50
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="HRC01943"
/clone_lib="Sugano Homo sapiens cDNA library"

ORIGIN

Query Match 68.0%; Score 6.8; DB 1; Length 50;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||:
Db 9 GAACGGTCG 17

RESULT 75

AU105098
LOCUS
DEFINITION
AU105098 Sugano Homo sapiens cDNA library Homo sapiens cDNA clone
KAT01889, mRNA sequence.

ACCESSION
AU105098
VERSION
AU105098.1 GI:13554619
KEYWORDS
EST.
SOURCE
Homo sapiens (human)

ORGANISM

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE

AUTHORS
Suzuki,Y., Taira,H., Tsunoda,T., Mizushima-Sugano,J., Sese,J.,
Hata,H., Ota,T., Isogai,T., Tanaka,T., Morishita,S., Okubo,K.,
Sakaki,Y., Nakamura,Y., Suyama,A. and Sugano,S.

Diverse transcriptional initiation revealed by fine, large-scale
mapping of mRNA start sites

JOURNAL
MEDLINE
PUBMED
EMBO Rep. 2 (5), 388-393 (2001)
21270072
11375929
Contact: Yutaka Suzuki
Department of Virology
Institute of Medical Science, University of Tokyo
4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan
Email: yezukui@ims.u-tokyo.ac.jp

COMMENT

Sugano,S. Construction and characterization of a full
length-enriched and a 5'-end-enriched cDNA library. Gene 200 (1-2),
149-156 (1997).

FEATURES

source
1. .50
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="KAT01889"
/clone_lib="Sugano Homo sapiens cDNA library"

ORIGIN

Query Match 68.0%; Score 6.8; DB 1; Length 50;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||:
Db 9 GAACGGTCG 17

RESULT 76

AU105834
LOCUS
DEFINITION
AU105834 Sugano Homo sapiens cDNA library Homo sapiens cDNA clone
KAT1187, mRNA sequence.

ACCESSION
AU105834
VERSION
AU105834.1 GI:13555355
KEYWORDS
EST.
SOURCE
Homo sapiens (human)

ORGANISM

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE

AUTHORS
Suzuki,Y., Taira,H., Tsunoda,T., Mizushima-Sugano,J., Sese,J.,
Hata,H., Ota,T., Isogai,T., Tanaka,T., Morishita,S., Okubo,K.,
Sakaki,Y., Nakamura,Y., Suyama,A. and Sugano,S.

TITLE Diverse transcriptional initiation revealed by fine, large-scale mapping of mRNA start sites

JOURNAL EMBO Rep. 2 (5), 388-393 (2001)

MEDLINE 21270072

PUBMED 11375929

COMMENT Contact: Yutaka Suzuki
Department of Virology
Institute of Medical Science, University of Tokyo
4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan
Email: yuzuki@ims.u-tokyo.ac.jp
Suzuki, Y., Yoshitomo-Nakagawa, K., Maruyama, K., Suyama, A. and Sugano, S. Construction and characterization of a full length-enriched and a 5'-end-enriched cDNA library. Gene 200 (1-2), 149-156 (1997).

FEATURES Location/Qualifiers

source 1..50

 /organism="Homo sapiens"

 /mol_type="mRNA"

 /db_xref="taxon:9606"

 /clone="KAT1187"

 /clone_lib="Sugano Homo sapiens cDNA library"

ORIGIN

Query Match 68.0%; Score 6.8; DB 1; Length 50;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
 :|:|:|

Db 24 GATCGGTCG 32
 :|:|:|

RESULT 77

AU106702

LOCUS AU106702 50 bp mRNA linear EST 28-JAN-2004

DEFINITION AU106702 Sugano Homo sapiens cDNA library Homo sapiens cDNA clone KAT09820, mRNA sequence.

ACCESSION AU106702

VERSION AU106702.1 GI:13556223

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

REFERENCE 1 (bases 1 to 50)
Suzuki, Y., Taira, H., Tsunoda, T., Mizushima-Sugano, J., Sese, J., Hata, H., Ota, T., Isogai, T., Tanaka, T., Morishita, S., Okubo, K., Sakaki, Y., Nakamura, Y., Suyama, A. and Sugano, S.
Diverse transcriptional initiation revealed by fine, large-scale mapping of mRNA start sites

TITLE Diverse transcriptional initiation revealed by fine, large-scale mapping of mRNA start sites

JOURNAL EMBO Rep. 2 (5), 388-393 (2001)

MEDLINE 21270072

PUBMED 11375929

COMMENT Contact: Yutaka Suzuki
Department of Virology
Institute of Medical Science, University of Tokyo
4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan
Email: yuzuki@ims.u-tokyo.ac.jp
Suzuki, Y., Yoshitomo-Nakagawa, K., Maruyama, K., Suyama, A. and Sugano, S. Construction and characterization of a full length-enriched and a 5'-end-enriched cDNA library. Gene 200 (1-2), 149-156 (1997).

FEATURES Location/Qualifiers

source 1..50

 /organism="Homo sapiens"

 /mol_type="mRNA"

 /db_xref="taxon:9606"

 /clone="KAT09820"

 /clone_lib="Sugano Homo sapiens cDNA library"

ORIGIN

Query Match 68.0%; Score 6.8; DB 1; Length 50;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
 :|:|:|

Db 18 GATCGGTCG 26
 :|:|:|

RESULT 78

AU106741/c

LOCUS AU106741 50 bp mRNA linear EST 28-JAN-2004

DEFINITION AU106741 Sugano Homo sapiens cDNA library Homo sapiens cDNA clone ADKA02253, mRNA sequence.

ACCESSION AU106741

VERSION AU106741.1 GI:13556262

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

REFERENCE 1 (bases 1 to 50)
Suzuki, Y., Taira, H., Tsunoda, T., Mizushima-Sugano, J., Sese, J., Hata, H., Ota, T., Isogai, T., Tanaka, T., Morishita, S., Okubo, K., Sakaki, Y., Nakamura, Y., Suyama, A. and Sugano, S.
Diverse transcriptional initiation revealed by fine, large-scale mapping of mRNA start sites

TITLE Diverse transcriptional initiation revealed by fine, large-scale mapping of mRNA start sites

JOURNAL EMBO Rep. 2 (5), 388-393 (2001)

MEDLINE 21270072

PUBMED 11375929

COMMENT Contact: Yutaka Suzuki
Department of Virology
Institute of Medical Science, University of Tokyo
4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan
Email: yuzuki@ims.u-tokyo.ac.jp
Suzuki, Y., Yoshitomo-Nakagawa, K., Maruyama, K., Suyama, A. and Sugano, S. Construction and characterization of a full length-enriched and a 5'-end-enriched cDNA library. Gene 200 (1-2), 149-156 (1997).

FEATURES Location/Qualifiers

source 1..50

 /organism="Homo sapiens"

 /mol_type="mRNA"

 /db_xref="taxon:9606"

 /clone="ADKA02253"

 /clone_lib="Sugano Homo sapiens cDNA library"

ORIGIN

Query Match 68.0%; Score 6.8; DB 1; Length 50;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
 :|:|:|

Db 36 AAGCGGTCG 28
 :|:|:|

RESULT 79

AU107943

LOCUS AU107943 50 bp mRNA linear EST 28-JAN-2004

DEFINITION AU107943 Sugano Homo sapiens cDNA library Homo sapiens cDNA clone COL08777, mRNA sequence.

ACCESSION AU107943

VERSION AU107943.1 GI:13557465

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

REFERENCE 1 (bases 1 to 50)
Suzuki, Y., Taira, H., Tsunoda, T., Mizushima-Sugano, J., Sese, J., Hata, H., Ota, T., Isogai, T., Tanaka, T., Morishita, S., Okubo, K., Sakaki, Y., Nakamura, Y., Suyama, A. and Sugano, S.
Diverse transcriptional initiation revealed by fine, large-scale mapping of mRNA start sites

TITLE Diverse transcriptional initiation revealed by fine, large-scale mapping of mRNA start sites

JOURNAL
MEDLINE
PUBMED
COMMENT

EMBO Rep. 2 (5), 388-393 (2001)
21270072
11375929
Contact: Yutaka Suzuki
Department of Virology
Institute of Medical Science, University of Tokyo
4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan
Email: yuzuki@ims.u-tokyo.ac.jp
Suzuki, Y., Yoshitomo-Nakagawa, K., Maruyama, K., Suyama, A. and Sugano, S. Construction and characterization of a full length-enriched and a 5'-end-enriched cDNA library. Gene 200 (1-2), 149-156 (1997).

FEATURES
source
1. .50
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="COL08777"
/clone_lib="Sugano Homo sapiens cDNA library"

ORIGIN

Query Match 68.0%; Score 6.8; DB 1; Length 50;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||: |||
Db 31 GACCGGTCG 39

RESULT 80
AU107943/c
LOCUS
AU107943 Sugano Homo sapiens cDNA library Homo sapiens cDNA clone
DEFINITION
COL08777, mRNA sequence.
ACCESSION
AU107943
VERSION
AU107943.1 GI:13557465
KEYWORDS
EST.
SOURCE
Homo sapiens (human)
ORGANISM
Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
1 (bases 1 to 50)
Suzuki, Y., Taira, H., Tsunoda, T., Mizushima-Sugano, J., Sese, J., Hata, H., Ota, T., Isegai, T., Tanaka, T., Morishita, S., Okubo, K., Sakaki, Y., Nakamura, Y., Suyama, A. and Sugano, S.
Diverse transcriptional initiation revealed by fine, large-scale mapping of mRNA start sites
JOURNAL
EMBO Rep. 2 (5), 388-393 (2001)
MEDLINE
21270072
PUBMED
11375929
Contact: Yutaka Suzuki
Department of Virology
Institute of Medical Science, University of Tokyo
4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan
Email: yuzuki@ims.u-tokyo.ac.jp
Suzuki, Y., Yoshitomo-Nakagawa, K., Maruyama, K., Suyama, A. and Sugano, S. Construction and characterization of a full length-enriched and a 5'-end-enriched cDNA library. Gene 200 (1-2), 149-156 (1997).

FEATURES
source
1. .50
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="COL08777"
/clone_lib="Sugano Homo sapiens cDNA library"

ORIGIN

Query Match 68.0%; Score 6.8; DB 1; Length 50;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||: |||
Db 38 GACCGGTCG 30

RESULT 81
CC325469/c
LOCUS
CC325469 TEA087 BayGenomics Gene Trap Library pGTILxf Mus musculus cDNA, mRNA sequence.
DEFINITION
CC325469
VERSION
CC325469.1 GI:30719527
KEYWORDS
GSS.
SOURCE
Mus musculus (house mouse)
ORGANISM
Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
REFERENCE
1 (bases 1 to 50)
http://baygenomics.ucsf.edu/
TITLE
http://baygenomics.ucsf.edu/
AUTHORS
Unpublished (2001)
JOURNAL
Contact: BayGenomics
COMMENT
Bay Area Functional Genomics Consortium (BayGenomics)
Email: info@baygenomics.ucsf.edu
Sequence tag generated by 5' RACE of total RNA from gene trap ES cell line. ES cell lines harboring insertion mutation of target gene are available upon request from BayGenomics. Annotation information available from
http://baygenomics.ucsf.edu/cgi-bin/BaySearch.py?OPTION=EXACT&TYPE=CELL_LINE&KEY=TEA087
CELL LINE=TEA087
Class: Gene Trap.

FEATURES
source
1. .50
/organism="Mus musculus"
/mol_type="mRNA"
/strain="129 ola"
/db_xref="taxon:10090"
/sex="Male"
/cell_type="Embryonic stem cell"
/clone_lib="BayGenomics Gene Trap Library pGTILxf"
/notes="Vector: pGTILxf"

ORIGIN

Query Match 68.0%; Score 6.8; DB 8; Length 50;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||: |||
Db 21 GATCGGTCG 13

RESULT 82
AL752914
LOCUS
AL752914 Arabidopsis thaliana T-DNA flanking sequence GK-018C06-013490, genomic survey sequence.
DEFINITION
AL752914
VERSION
AL752914.1 GI:21485412
KEYWORDS
GSS.
SOURCE
Arabidopsis thaliana (thale cress)
ORGANISM
Arabidopsis thaliana
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsi
1
Li, Y., Rosso, M.G., Strizhov, N., Vishnover, P. and Weissshaar, B.
GABI-Kat SimpleSearch: a flanking sequence tag (FST) database for the identification of T-DNA insertion mutants in Arabidopsis thaliana
JOURNAL
Bioinformatics 19 (11), 1441-1442 (2003)
MEDLINE
22755829
PUBMED
12874060

/mol_type="mRNA"
 /db_xref="taxon:9606"
 /clone="IMAGE:3935700"
 /lab_host="DH10B (T1 phage-resistant)"
 /clone_lib="NIH_MGC_82"
 /notes="Organ: testis; Vector: pDNR-LIB (Clontech); Site:1: SfiI (ggcgctcgcc); Site 2: SfiI (ggccattatggcc); 5' and 3' adaptors were used in cloning as follows: 5' adaptor sequence: 5'-CACGGCCATTATGGCC-3' and 3' adaptor sequence: 5'-ATTCTAGAGCCGAGGGCGGCGGACATG-dT(30)BN-3' (where B = A, C, or G and N = A, C, G, or T). Average insert size 1.35 kb (range 0.9-4.0 kb). 14/15 colonies contained inserts by PCR. This library was enriched for full-length clones and was constructed by Clontech Laboratories (Palo Alto, CA)."

ORIGIN

Query Match 68.0%; Score 6.8; DB 2; Length 51;
 Best Local Similarity 66.7%; Pred. No. 4.5e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANGGKTCG 10
 :|||:||||
 Db 28 TATCGGTGCG 36

RESULT 85
 BU067023/c
 LOCUS
 DEFINITION 1614_B06_C1225T Mature perithecium Gibberella zeae cDNA, mRNA
 ACCESSION BU067023
 VERSION BU067023.1 GI:22508212
 KEYWORDS EST.
 SOURCE Gibberella zeae
 ORGANISM Gibberella zeae
 Eukaryota; Fungi; Ascomycota; Pezizomycotina; Sordariomycetes; Hypocreomycetidae; Hypocreales; Nectriaceae; Gibberella.

REFERENCE 1 (bases 1 to 51)
 Trail,F., Xu,J.-R., San Miguel,P., Halgren,R.G. and Kistler,H.C.
 Analysis of expressed sequence tags from Gibberella zeae (anamorph Fusarium graminearum)
 Fungal Genet. Biol. 38 (2), 187-197 (2003)
 MEDLINE 22508120
 PUBMED 12620255
 CONTACT: Frances Trail
 Department of Plant Biology
 Michigan State University
 East Lansing, MI 48824, USA
 Tel: 517 432 2939
 Fax: 517 353 1926
 Email: trail@msu.edu.

FEATURES

source
 1..51
 /organism="Gibberella zeae"
 /mol_type="mRNA"
 /strain="NRRL 31084"
 /db_xref="taxon:5518"
 /clone_lib="Mature perithecium"
 /note="Vector: ZipLox; Site_1: NotI; Site_2: SalI"

ORIGIN

Query Match 68.0%; Score 6.8; DB 5; Length 51;
 Best Local Similarity 66.7%; Pred. No. 4.5e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANGGKTCG 10
 :|||:||||
 Db 24 TAGCGGTGCG 16

RESULT 86

BU583828

LOCUS
 DEFINITION BU583828 51 bp mRNA linear EST 20-SEP-2002
 mail2b09.Y1 McCarrey Eddy 18 20 day sertoli cell Mus musculus cDNA
 clone IMAGE:6369737 5', mRNA sequence.
 ACCESSION BU583828
 VERSION BU583828.1 GI:23257793
 KEYWORDS EST.
 SOURCE Mus musculus (house mouse)
 ORGANISM Mus musculus
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 McCarrey,J., Eddy,M., Marra,M., Hillier,L., Clifton,S., Pape,D., Martin,J., Wylie,T., Dante,M., Bowers,Y., Theising,B., Gibbons,M., Ritter,E., Tsagarisvili,R., Ronko,I., Maguire,L., Kennedy,S., Bennett,J., Waterston,R. and Wilson,R.
 NIHES Mouse
 UNPUBLISHED (2002)
 CONTACT: McCarrey/Eddy NIHES Mouse
 NIHES Mouse
 Washington University School of Medicine
 4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108, USA
 Tel: 314 286 1800
 Fax: 314 286 1810
 Email: est@watson.wustl.edu
 Library constructed and donated by J. McCarrey, Ph.D. (Southwest Foundation for Biomedical Research, Dept. of Genetics) - excision done by E.M. Eddy, Ph.D. (National Institutes of Health, National Institute of Environmental Health Sciences).
 MGI:2047169
 Seq primer: -40RP from Gibco.

FEATURES

source
 1..51
 /organism="Mus musculus"
 /mol_type="mRNA"
 /db_xref="taxon:10090"
 /clone="IMAGE:6369737"
 /sex="male"
 /tissue_type="sertoli cells"
 /lab_host="DH10B (phage-resistant)"
 /clone_lib="McCarrey Eddy 18 20 day sertoli cell"
 /note="Organ: testis; Vector: pBluescript SK+ (Stratagene); Site 1: EcoRI; Site 2: XhoII; cDNA oligo dt-primerd [5'-GA)10-ACTAGTCGCGAGTTTCTTTT-3'] and directionally cloned using 5' linkers 5'-AATTGCGCAGAG-3' and 5'-CTCGTCCG-3'. Size selection of >400bp material gives average insert size ranging from 1-2 kb. Library was single-stranded phagemids were prepped and tranformed into DH10B. Library constructed and donated by J. McCarrey, Ph.D. (Southwest Foundation for Biomedical Research, Dept. of Genetics); excision done by E.M. Eddy, Ph.D. (National Institutes of Health, National Institute of Environmental Health Sciences)."

ORIGIN

Query Match 68.0%; Score 6.8; DB 5; Length 51;
 Best Local Similarity 66.7%; Pred. No. 4.5e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANGGKTCG 10
 :|||:||||
 Db 4 GACCGGTGCG 12

RESULT 87

CD743956/c
 LOCUS
 DEFINITION CD743956 51 bp mRNA linear EST 25-JUN-2004
 IRB15_F11 IRB15 092 Infected Rat Blood-fed (IRB) An.gam. 30 hr
 Abdomen Library Anopheles gambiae cDNA 5', mRNA sequence.
 ACCESSION CD743956
 VERSION CD743956.1 GI:49247887
 KEYWORDS EST.
 SOURCE Anopheles gambiae (African malaria mosquito)

survey sequence.

CC884865
 CC884865.1 GI:33361221
 GSS.
 Arabidopsis thaliana (thale cress)
 Arabidopsis thaliana
 Arabidopsis thaliana

Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
 Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
 rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsi.

1 (bases 1 to 51)

Alonso,J.M., Leisse,T.J., Barajas,P., Chen,H., Cheuk,R.,
 Gadrinab,C., Jeske,A., Karnes,M., Kim,C.J., Parker,H., Prednis,L.,
 Shinn,P., Zimmerman,J. and Ecker,J.R.

A Sequence-Indexed Library of Insertion Mutations in the

Arabidopsis Genome

Unpublished (2001)

Contact: Joseph R. Ecker

Salk Institute Genomic Analysis Laboratory (SIGnAL)

The Salk Institute for Biological Studies

10010 N. Torrey Pines Road, La Jolla, CA 92037, USA

Tel: 858 453 4100 x1752

Fax: 858 558 6379

Email: eckersalk.edu

This is single pass sequence recovered from the left border of
 TDNA. This sequence lies within 300 bases of the 3' end of
 At5g37130.

Class: TDNA tagged.

Location/Qualifiers

1. .51

/organism="Arabidopsis thaliana"

/mol_type="genomic DNA"

/ecotype="Col-0"

/db_xref="taxon:3702"

/clone_lib="SAUK_144687.15.95.x"

/note="Arabidopsis thaliana TDNA insertion lines"

/note="PCR was performed on Arabidopsis thaliana lines

each of which contains one or more TDNA insertion

elements. The resultant fragment for each line was

directly sequenced to determine the genomic sequence at

the site of insertion. Details of the protocols used can

be found at http://signal.salk.edu/tdna_protocols.html"

FEATURES

source

ORIGIN

Query Match 68.0%; Score 6.8; DB 9; Length 51;
 Best Local Similarity 66.7%; Pred. No. 4.5e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10

:|:|:|

Db 14 TACGGTCG 6

RESULT 92

AI440320/c

LOCUS

tc82g10.x1 NCI_CGAP CLL1 Homo sapiens

DEFINITION

similar to SW:CA44_RABIT P55787 COLLAGEN ALPHA 4(IV) CHAIN ;, mRNA

sequence.

AI440320

AI440320.1 GI:4281884

ACCESSION

VERSION

KEYWORDS

SOURCE

ORGANISM

Homo sapiens

Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE

AUTHORS

TITLE

JOURNAL

COMMENT

CG712445 51 bp DNA linear GSS 20-OCT-2003

LOCUS 1119027A07.x1 1119 - RescueMu Grid AA Zea mays genomic, genomic

DEFINITION survey sequence.

CG712445

CG712445.1 GI:37738351

ACCESSION GSS.

VERSION

KEYWORDS

SOURCE

ORGANISM

Zea mays

Zea mays

Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;

Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD

clade; Panicoideae; Andropogoneae; Zea.

1 (bases 1 to 51)

Walbot,V.

Maize genomic sequences found using engineered RescueMu transposon

Unpublished (2001)

Contact: Walbot V

Department of Biological Sciences

Stanford University

855 California Ave, Palo Alto, CA 94304, USA

Tel: 650 723 2227

Fax: 650 725 8221

Email: walbot@stanford.edu

Possible ligation site so sequence was trimmed. Post-ligation

sequence submitted separately.

Plate: 1119027 row: A column: 07

Class: transposon-tagged.

Location/Qualifiers

1. .51

/organism="Zea mays"

/mol_type="genomic DNA"

/cultivar="mixed background W23/A188/B73/K55"

/db_xref="taxon:4577"

/tissue_type="leaf"

/dev_stage="adult"

/lab_host="DH10B"

/clone_lib="1119 - RescueMu Grid AA"

/note="Organ: leaf; Vector: RescueMu (engineered from

pBlueScript backbone); Site 1: BamHI; Site 2: BglII;

RescueMu is a 4.9 kb, modified maize Mu transposon

designed to allow plasmid rescue from total genomic DNA.

Mu elements insert preferentially into transcription

units. For more information on RescueMu, go to the web

site 'www.zmdb.iastate.edu' and follow the links for

'RescueMu.' Grid AA was grown at UC San Diego in 2002. DNA

was extracted from leaf strips, double digested using

BamHI and BglII, and ligated to form circular plasmids.

DH10B cells were transformed and then screened on LB

plates with ampicillin."

ORIGIN

Query Match 68.0%; Score 6.8; DB 9; Length 51;
 Best Local Similarity 66.7%; Pred. No. 4.5e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10

:|:|:|

Db 14 TACGGTCG 6

RESULT 92

AI440320/c

LOCUS

tc82g10.x1 NCI_CGAP CLL1 Homo sapiens

DEFINITION

similar to SW:CA44_RABIT P55787 COLLAGEN ALPHA 4(IV) CHAIN ;, mRNA

sequence.

AI440320

AI440320.1 GI:4281884

ACCESSION

VERSION

KEYWORDS

SOURCE

ORGANISM

Homo sapiens

Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE

AUTHORS

TITLE

JOURNAL

COMMENT

CG712445 51 bp DNA linear GSS 20-OCT-2003

LOCUS 1119027A07.x1 1119 - RescueMu Grid AA Zea mays genomic, genomic

DEFINITION survey sequence.

CG712445

CG712445.1 GI:37738351

ACCESSION GSS.

VERSION

KEYWORDS

SOURCE

ORGANISM

Zea mays

Zea mays

Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;

Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD

clade; Panicoideae; Andropogoneae; Zea.

1 (bases 1 to 51)

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Plate: 1119027 row: A column: 07

Class: transposon-tagged.

Location/Qualifiers

1. .51

/organism="Zea mays"

/mol_type="genomic DNA"

/cultivar="mixed background W23/A188/B73/K55"

/db_xref="taxon:4577"

/tissue_type="leaf"

/dev_stage="adult"

/lab_host="DH10B"

/clone_lib="1119 - RescueMu Grid AA"

/note="Organ: leaf; Vector: RescueMu (engineered from

pBlueScript backbone); Site 1: BamHI; Site 2: BglII;

RescueMu is a 4.9 kb, modified maize Mu transposon

designed to allow plasmid rescue from total genomic DNA.

Mu elements insert preferentially into transcription

units. For more information on RescueMu, go to the web

site 'www.zmdb.iastate.edu' and follow the links for

'RescueMu.' Grid AA was grown at UC San Diego in 2002. DNA

was extracted from leaf strips, double digested using

BamHI and BglII, and ligated to form circular plasmids.

DH10B cells were transformed and then screened on LB

plates with ampicillin."

ORIGIN

Query Match 68.0%; Score 6.8; DB 9; Length 51;
 Best Local Similarity 66.7%; Pred. No. 4.5e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10

:|:|:|

Db 14 TACGGTCG 6

RESULT 92

AI440320/c

LOCUS

tc82g10.x1 NCI_CGAP CLL1 Homo sapiens

DEFINITION

similar to SW:CA44_RABIT P55787 COLLAGEN ALPHA 4(IV) CHAIN ;, mRNA

sequence.

AI440320

AI440320.1 GI:4281884

ACCESSION

VERSION

KEYWORDS

SOURCE

ORGANISM

Homo sapiens

Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE

AUTHORS

TITLE

JOURNAL

COMMENT

CG712445 51 bp DNA linear GSS 20-OCT-2003

LOCUS 1119027A07.x1 1119 - RescueMu Grid AA Zea mays genomic, genomic

DEFINITION survey sequence.

CG712445

CG712445.1 GI:37738351

ACCESSION GSS.

VERSION

KEYWORDS

SOURCE

ORGANISM

Zea mays

Zea mays

Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;

Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD

clade; Panicoideae; Andropogoneae; Zea.

1 (bases 1 to 51)

Walbot,V.

Maize genomic sequences found using engineered RescueMu transposon

Unpublished (2001)

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Tel: 650 723 2227

Fax: 650 725 8221

Email: walbot@stanford.edu

Possible ligation site so sequence was trimmed. Post-ligation

sequence submitted separately.

Plate: 1119027 row: A column: 07

Class: transposon-tagged.

Location/Qualifiers

1. .51

/organism="Zea mays"

/mol_type="genomic DNA"

/cultivar="mixed background W23/A188/B73/K55"

/db_xref="taxon:4577"

FEATURES
source

Location/Qualifiers
1. .52
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:2072706"
/tissue_type="B-cell, chronic lymphocytic leukemia"
/lab_host="DH10B"
/clone_lib="NCI CGAP CLL1"
/note="Vector: pT73D-Pac (Pharmacia) with a modified polylinker; Site 1: Not I; Site 2: Eco RI; 1st strand cDNA was primed with a Not I - oligo(dT) primer [5' TGTTACCATCTGAAGTGGAGCGCCGCTGTTTTTTTTTTTTTTTTTTT T 3']; double-stranded cDNA was ligated to Eco RI adaptors (Pharmacia), digested with Not I and cloned into the Not I and Eco RI sites of the modified pT73 vector. Library is normalized, and was constructed by Bento Soares and M. Fatima Bonaldo."

ORIGIN

Query Match 68.0%; Score 6.8; DB 1; Length 52;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGKTCG 10
:|||||
Db 42 GAGCGGTCG 34

RESULT 93

CB379027/c
LOCUS
DEFINITION
CB379027 52 bp mRNA linear EST 16-MAY-2003
rglch10.y1 Heterodera glycines J3 Heterodera glycines cDNA 5', mRNA
sequence.
ACCESSION
CB379027.1 GI:29128323
VERSION
CB379027.1
KEYWORDS
EST.
SOURCE
Heterodera glycines
ORGANISM
Heterodera glycines
Eukaryota; Metazoa; Nematoda; Chromadorea; Tylenchida; Tylenchina;
Tylenchoidea; Heteroderidae; Heteroderinae; Heterodera.

REFERENCE
AUTHORS

1 (bases 1 to 52)
McCarter, J., Clifton, S., Chiapelli, B., Pape, D., Martin, J.,
Wylie, T., Dante, M., Marra, M., Hillier, L., Kucaba, T., Theising, B.,
Bowers, Y., Gibbons, M., Ritter, E., Bennett, J., Franklin, C.,
Tsagarishvili, R., Ronko, I., Kennedy, S., Maguire, L., Beck, C.,
Underwood, K., Steptoe, M., Allen, M., Person, B., Swaller, T.,
Harvey, N., Schurk, R., Kohn, S., Shin, T., Jackson, Y., Cardenas, M.,
McCann, R., Waterston, R. and Wilson, R.
The Washington Univ. Nematode EST Project, 1999
Unpublished (1999)

TITLE
JOURNAL
COMMENT

Contact: McCarter JP
The Washington Univ. Nematode EST Project, 1999
Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108, USA
Tel: 314 286 1800
Fax: 314 286 1810
Email: est@watson.wustl.edu

This library was generated by cloning cDNAs directionally into
Uni-ZAP(Stratagene) (T3 primer/EcoRI are at the 5'-end and T7/XhoI
are at the 3'-end). The library was excised [now in pBluescript
SK(+)] and normalized (Bonaldo et al 1996 Genome Research
6:791-806). Library constructed by Thomas Baum (tbaum@iastate.edu),
Iowa State University, Plant Pathology Department and Jeff
McDermott (jpmcderm@iastate.edu).

Putative full length read
The vector to vector length is 53
Seq primer: T3 from Gibco.

FEATURES
source

1. .52
/organism="Heterodera glycines"
/mol_type="mRNA"
/db_xref="taxon:51029"

/sex="mixed"
/tissue_type="whole organism"
/dev_stage="3rd stage juvenile"
/lab_host="DH10B"

/clone_lib="Heterodera glycines J3"
/note="Vector: pBluescript SK+ (Stratagene); Site 1: XhoI;
Site 2: EcoRI. This library was generated by cloning cDNAs
directionally into Uni-ZAP(Stratagene) (T3 primer/EcoRI
are at the 5'-end and T7/XhoI are at the 3'-end). The
library was excised [now in pBluescript SK(+)] and
normalized (Bonaldo et al 1996 Genome Research 6:791-806).
Library constructed by Thomas Baum (tbaum@iastate.edu),
Iowa State University, Plant Pathology Department and Jeff
McDermott (jpmcderm@iastate.edu)."

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 52;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGKTCG 10
:|||||
Db 24 GATCGTTCG 16

RESULT 94

CR411873/c
LOCUS
DEFINITION
CR411873 52 bp mRNA linear EST 13-JUN-2004
CR411873 XGC-tailbud Xenopus tropicalis cDNA clone TTBA063g09 5',
mRNA sequence.

ACCESSION
CR411873
VERSION
CR411873.1 GI:48680120
KEYWORDS
EST.

SOURCE
Xenopus tropicalis (western clawed frog)
ORGANISM
Xenopus tropicalis
Eukaryota; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Mesobatrachia; Pipidae;
Xenopodinae; Xenopus; Silurana.

REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT

1 (bases 1 to 52)
Croning, M.D.R., Ashurst, J.L., Taylor, R., Garrett, N. and Rogers, J.
Sanger Xenopus tropicalis EST project 2001 (2004)
Unpublished (2004)
Contact: Croning MDR
Sanger Institute
Hinxton, Cambridgeshire, CB10 1SA, UK
Email: trop@sanger.ac.uk

Sanger Xenopus tropicalis EST project 2001
TROPICALIS_SEQUENCE ID: TTBA063g09.p1ksp6
This sequence is from a Xenopus Gene Collection (XGC) library
constructed by Nigel Garrett.
Seq primer: SP6.

FEATURES
source

Location/Qualifiers
1. .52
/organism="Xenopus tropicalis"
/mol_type="mRNA"
/db_xref="taxon:8364"
/clone="TTBA063g09"
/dev_stage="tailbud (stage 28-30)"
/lab_host="Escherichia coli DH10B."
/clone_lib="XGC-tailbud"
/note="Vector: pCS107; Site 1: EcoRI; Site 2: NotI; cDNA
was oligo dt primed from sug of poly A+ RNA from tailbud.
EcoRI-NotI cut cDNA was then ligated into pCS107 with
EcoRI at the 5' end and NotI at the 3' end."

ORIGIN

Query Match 68.0%; Score 6.8; DB 7; Length 52;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGKTCG 10
:|||||
Db 11 GAACGTCG 3

RESULT 95
 AZ921909/c
 LOCUS
 DEFINITION HRCot3G06 Sorghum bicolor HRCot Sorghum bicolor genomic similar to Sorghum bicolor Retrosor-6 retroelement, genomic survey sequence.
 ACCESSION
 VERSION AZ921909.1 GI:13400268
 KEYWORDS
 SOURCE
 ORGANISM
 Sorghum bicolor (sorghum)
 Sorghum bicolor
 Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD clade; Panicoideae; Andropogoneae; Sorghum.
 REFERENCE
 1 (bases 1 to 52)
 AUTHORS Peterson, D.G., Schulze, S.R., Sciarra, B.B., Lee, S.A., Bowers, J.E., Nagel, A., Jiang, N., Tibbitts, D.C., Wessler, S.R., and Paterson, A.H.
 TITLE Integration of Cot analysis, DNA cloning, and high-throughput sequencing facilitates genome characterization and gene discovery
 JOURNAL Genome Res. 12 (5), 795-807 (2002)
 MEDLINE 2192826
 PUBMED 11997346
 COMMENT Contact: Peterson DG
 Plant Genome Mapping Laboratory
 University of Georgia
 Room 162, Riverbend Research Bldg., 110 Riverbend Rd., Athens, GA 30602, USA
 Tel: 706-583-0167
 Fax: 706-583-0160
 Email: dgp@arches.uga.edu
 Class: Hydroxyapatite-fractionated DNA.

FEATURES
 source
 1..52
 /organism="Sorghum bicolor"
 /mol_type="genomic DNA"
 /cultivar="BTx623"
 /db_xref="taxon:4558"
 /tissue_type="leaves"
 /dev_stage="seedling"
 /clone_lib="Sorghum bicolor HRCot"
 /note="Vector: pGEM-TA-Easy; A Cot analysis was performed for the sorghum genome. Based on the resulting Cot curve, hydroxyapatite chromatography was used to isolate 'highly-repetitive' (HR), 'moderately-repetitive' (MR), and 'single/low-copy' (SL) sequence components from sheared genomic DNA. The three repetition-based DNA components were cloned into E. coli to produce HRCot, MRCot, and SLcot genomic libraries. Blotting and sequencing data indicates that each library is representative of the component from which it was derived. Putative ID listings given for sequences are based on comparison (blastn) with sequences in the NCBI Nr Database. Only the primary match is given (all primary E values are < or = 1.00E-5). In no instance does a 'Cot clone' contain the complete sequence of its putative Nr match."

ORIGIN
 Query Match 68.0%; Score 6.8; DB 8; Length 52;
 Best Local Similarity 66.7%; Pred. No. 4.5e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 Qy 2 DANCCKTCG 10
 :|:|:|:|:
 Db 39 AAGCGTTCG 31

RESULT 96
 BZ287252
 LOCUS
 DEFINITION SALK_020622.33.55.x Arabidopsis thaliana TDNA insertion lines Arabidopsis thaliana genomic clone SALK_020622.33.55.x, genomic

survey sequence.
 BZ287252
 VERSION BZ287252.1 GI:24324873
 KEYWORDS
 SOURCE
 ORGANISM
 Arabidopsis thaliana (thale cress)
 Arabidopsis thaliana
 Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosids; eurosids II; Brassicales; Brassicaceae; Arabidopses.
 REFERENCE
 1 (bases 1 to 52)
 AUTHORS Alonso, J.M., Leisse, T.J., Barajas, P., Chen, H., Cheuk, R., Gadrinab, C., Jeske, A., Karnes, M., Kim, C.J., Parker, H., Prednis, L., Shinn, P., Zimmermann, J., and Ecker, J.R.
 TITLE A Sequence-Indexed Library of Insertion Mutations in the Arabidopsis Genome
 JOURNAL Unpublished (2001)
 COMMENT Contact: Joseph R. Ecker
 Salk Institute Genomic Analysis Laboratory (SIGnAL)
 The Salk Institute for Biological Studies
 10010 N. Torrey Pines Road, La Jolla, CA 92037, USA
 Tel: 858 453 4100 x1752
 Fax: 858 558 6379
 Email: ecker@salk.edu
 This is single pass sequence recovered from the left border of TDNA. This sequence lies within an annotated exon of At3g58650.
 Class: TDNA tagged.

FEATURES
 Location/Qualifiers
 1..52
 /organism="Arabidopsis thaliana"
 /mol_type="genomic DNA"
 /ecotype="Col-0"
 /db_xref="taxon:3702"
 /clone="SALK_020622.33.55.x"
 /clone_lib="Arabidopsis thaliana TDNA insertion lines"
 /note="PCR was performed on Arabidopsis thaliana lines each of which contains one or more TDNA insertion elements. The resultant fragment for each line was directly sequenced to determine the genomic sequence at the site of insertion. Details of the protocols used can be found at http://signal.salk.edu/tdna_protocols.html"

ORIGIN
 Query Match 68.0%; Score 6.8; DB 8; Length 52;
 Best Local Similarity 66.7%; Pred. No. 4.5e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 Qy 2 DANCCKTCG 10
 :|:|:|:|:
 Db 11 AAGCGTTCG 19

RESULT 97
 CR359266
 LOCUS
 DEFINITION Arabidopsis thaliana T-DNA flanking sequence GK-734G07-025441, genomic survey sequence.
 ACCESSION
 VERSION CR359266.1 GI:45542188
 KEYWORDS
 SOURCE
 ORGANISM
 Arabidopsis thaliana (thale cress)
 Arabidopsis thaliana
 Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsis.

REFERENCE
 1
 AUTHORS Li, Y., Rosso, M.G., Strizhov, N., Viehoever, P., and Weishaar, B.
 TITLE GABI-Kat SimpleSearch: a flanking sequence tag (FST) database for the identification of T-DNA insertion mutants in Arabidopsis thaliana
 JOURNAL Bioinformatics 19 (11), 1441-1442 (2003)
 MEDLINE 22755829
 PUBMED 12874060
 REFERENCE 2

AUTHORS Rosso,M.G., Li,Y., Strizhov,N., Reiss,B., Dekker,K. and Weisshaar,B.
TITLE An Arabidopsis thaliana T-DNA mutagenized population (GABI-Kat) for flanking sequence tag-based reverse genetics
JOURNAL Plant Mol. Biol. 53 (1-2), 247-259 (2003)
MEDLINE 23117147
PUBMED 14756321
AUTHORS Strizhov,N., Li,Y., Rosso,M.G., Viehoveer,P., Dekker,K.A. and Weisshaar,B.
TITLE High-throughput generation of sequence indexes from T-DNA mutagenized Arabidopsis thaliana lines
JOURNAL Biotechniques 35 (6), 1164-1168 (2003)
PUBMED 14682050
REFERENCE 4 (bases 1 to 52)
AUTHORS Rosso,M.G., Li,Y., Strizhov,N. and Weisshaar,B.
TITLE Direct Submission
JOURNAL Submitted (31-MAR-2004) Weisshaar B., Max-Planck-Institut fuer Zuechtungsforschung, Carl-von-Linne-Weg 10, Koeln, 50829, Germany
COMMENT This sequence has been recovered from the left border of the T-DNA. It indicates an insertion close to or within gene At1g20960. Details on the protocols used for generation of the sequence are described in References 1-3. The sequences are generated at the MPI for Plant Breeding Research in the context of the GABI-Kat project. GABI-Kat is part of the German Plant Genomics program designated 'GABI'. Information on line availability can be found at: <http://www.mpiz-koeln.mpg.de/GABI-Kat/>.

FEATURES
 source
 1..52
 /organism="Arabidopsis thaliana"
 /mol_type="genomic DNA"
 /strain="Columbia 0"
 /db_xref="taxon:3702"
 /clones="GK-734G07-025441"
 /clone_lib="Arabidopsis thaliana T-DNA insertion lines"
 /ecotype="Col-0"
 /notes="PCR was performed on DNA from Arabidopsis thaliana plants (Ti) which were transformed with the T-DNA from vector pGAB11 (GenBank accession number: AY529716). The lines contain one or more T-DNA insertions. The DNA fragment(s) resulting from the PCR were directly sequenced to determine the genomic sequence flanking the insertion. T-DNA derived sequences were removed."

ORIGIN
 Query Match 68.0%; Score 6.8; DB 9; Length 52;
 Best Local Similarity 66.7%; Pred. No. 4.5e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANCCKTCG 10
 :|||:
 Db 18 TATCGGTCG 26

RESULT 98
TA27H11Q/c
LOCUS 52 bp DNA linear GSS 13-DEC-2000
DEFINITION T. brucei sheared genomic DNA clone 27h11, reverse sequence, genomic survey sequence.
ACCESSION AL453630
VERSION AL453630.1 GI:11851028
KEYWORDS GSS.
SOURCE
ORGANISM Trypanosoma brucei
 Eukaryota; Euzlenozoa; Kinetoplastida; Trypanosomatidae; Trypanosoma.
REFERENCE 1 (bases 1 to 52)
AUTHORS Hall,N., Bowman,S., Lennard,N.J., Doggett,J., Atkin,R., Chillingworth,C., Ormond,D., Harris,B., El-Sayed,N., Hou,L., Melville,S.E., Rajandream,M.A. and Barrell,B.G.
TITLE Direct Submission
JOURNAL Submitted (10-DEC-2000) Trypanosoma brucei genome sequencing project, Sanger Centre, The Wellcome Trust Genome Campus, Hinxton,

Cambridge CB10 1SA, E-mail: barrell@sanger.ac.uk and nhl@sanger.ac.uk
 Constructed at the Institute for Genomic Research (TIGR), Rockville, MD. Genomic DNA isolated from a cloned population of Trypanosoma brucei (TREU927/4 GUTat 10.1) was mechanically sheared to give a tight size distribution (4 kb). The v + i method used for the library construction is described in detail in Smith, H. and Venter, J.C. (Making small insert libraries for whole genome shotgun sequencing projects. In Genome Sequencing: A Practical Approach, eds. M. Vaudin and B. Barrell, Oxford University Press, 1999).
 Email: neilsayed@tigr.org
 Details of T. brucei sequencing at the Sanger Centre are available at http://www.sanger.ac.uk/Projects/T_brucei/.

FEATURES
 source
 1..52
 /organism="Trypanosoma brucei"
 /mol_type="genomic DNA"
 /strain="TREU927"
 /db_xref="taxon:5691"
 /clones="27h11"

ORIGIN
 Query Match 68.0%; Score 6.8; DB 9; Length 52;
 Best Local Similarity 66.7%; Pred. No. 4.5e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANCCKTCG 10
 :|||:
 Db 26 TAACGGTCG 18

RESULT 99
CC886264
LOCUS 52 bp DNA linear GSS 31-JUL-2003
DEFINITION SALK_148394.24.40.x Arabidopsis thaliana T-DNA insertion lines Arabidopsis thaliana genomic clone SALK_148394.24.40.x, genomic survey sequence.
ACCESSION CC886264
VERSION CC886264.1 GI:33362620
KEYWORDS GSS.
SOURCE Arabidopsis thaliana (thale cress)
ORGANISM Arabidopsis thaliana
 Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsis.
REFERENCE 1 (bases 1 to 52)
AUTHORS Alonso,J.M., Leisse,T.J., Barajas,P., Chen,H., Cheuk,R., Gadrinab,C., Jeske,A., Karnes,M., Kim,C.J., Parker,H., Prednis,L., Shinn,P., Zimmerman,J. and Ecker,J.R.
TITLE A Sequence-Indexed Library of Insertion Mutations in the Arabidopsis Genome
JOURNAL Unpublished (2001)
COMMENT Contact: Joseph R. Ecker
 Salk Institute Genomic Analysis Laboratory (SIGNAL)
 The Salk Institute for Biological Studies
 10010 N. Torrey Pines Road, La Jolla, CA 92037, USA
 Tel: 858 453 4100 x1752
 Fax: 858 558 6379
 Email: ecker@salk.edu
 This is single pass sequence recovered from the left border of T-DNA.
 Class: T-DNA tagged.
 Location/Qualifiers
 1..52
 /organism="Arabidopsis thaliana"
 /mol_type="genomic DNA"
 /ecotype="Col-0"
 /db_xref="taxon:3702"
 /clone_lib="SALK_148394.24.40.x"
 /notes="PCR was performed on Arabidopsis thaliana lines each of which contains one or more T-DNA insertion

elements. The resultant fragment for each line was directly sequenced to determine the genomic sequence at the site of insertion. Details of the protocols used can be found at http://signal.salk.edu/tdna_protocols.html

ORIGIN

Query Match 68.0%; Score 6.8; DB 9; Length 52;
 Best Local Similarity 66.7%; Pred. No. 4.5e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANGKTCG 10
 : |||||
 Db 8 AACCGTCG 16

RESULT 100

CL302626/c
 LOCUS CL302626
 DEFINITION G063B06 GGTC Gene Trap Library GV07C05 Mus musculus cDNA clone
 G063B06, mRNA sequence.

ACCESSION CL302626
 VERSION CL302626.1 GI:42743455
 KEYWORDS GSS.
 SOURCE Mus musculus (house mouse)
 ORGANISM Mus musculus

REFERENCE Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Mus.
 AUTHORS Hansen, J., Floss, T., van Sloun, P., Fuchtbauer, E.M., Vauti, F.,
 Arnold, H.H., Schnutgen, F., Wurst, W., Von Melchner, H. and Ruiz, P.
 TITLE A large-scale, gene-driven mutagenesis approach for the functional
 analysis of the mouse genome
 JOURNAL Proc. Natl. Acad. Sci. U.S.A. 100 (17), 9918-9922 (2003)
 MEDLINE 22810117
 PUBMED 12904583

COMMENT Contact: GGTC
 German Genetrap Consortium (GGTC)
 Email: info@genetrap.de
 U3CEO gene trap. Sequence tag generated by 5'RACE. Additional
 sequence information can be found at:
 'http://genetrap.gsf.de/project/web_new/database/result_clone.html?
 clone_id=G063B06', ES cell line harboring insertion mutation of
 target gene is available at:
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 1. Inhouse Sequence Identifier: 18093
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 /note="Vector: U3CEO"

FEATURES

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 QY 2 DANGKTCG 10
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 Db 43 AACCGTCG 35

Search completed: June 30, 2005, 02:04:34
 Job time : 1728 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2005 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: June 29, 2005, 16:54:07 ; Search time 857.5 Seconds
(without alignments)
565.075 Million cell updates/sec

Title: US-10-033-243-62

Perfect score: 10

Sequence: 1 ndancgkctg 10

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 4708233 segs, 24227607955 residues

Total number of hits satisfying chosen parameters: 9416466

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 100 summaries

Database :

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2: gb_htg:

3: gb_in:

4: gb_om:

5: gb_ov:

6: gb_pat:

7: gb_ph:

8: gb_pl:

9: gb_pr:

10: gb_ro:

11: gb_sts:

12: gb_sy:

13: gb_un:

14: gb_vi:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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| 2 | 6.8 | 68.0 | 10 | 6 | AX592373 Sequence |
| 3 | 6.8 | 68.0 | 10 | 6 | AX592374 Sequence |
| 4 | 6.8 | 68.0 | 10 | 6 | AX592377 Sequence |
| 5 | 6.8 | 68.0 | 10 | 6 | AX592378 Sequence |
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| 7 | 6.8 | 68.0 | 10 | 6 | AX592380 Sequence |
| 8 | 6.8 | 68.0 | 10 | 6 | AX592381 Sequence |
| 9 | 6.8 | 68.0 | 10 | 6 | AX592382 Sequence |
| 10 | 6.8 | 68.0 | 10 | 6 | AX592383 Sequence |
| 11 | 6.8 | 68.0 | 10 | 6 | AX592384 Sequence |
| 12 | 6.8 | 68.0 | 10 | 6 | AX592385 Sequence |
| 13 | 6.8 | 68.0 | 10 | 6 | AX592386 Sequence |
| 14 | 6.8 | 68.0 | 10 | 6 | AX592387 Sequence |
| 15 | 6.8 | 68.0 | 10 | 6 | AX592387 Sequence |
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| 19 | 6.8 | 68.0 | 10 | 6 | AX592390 Sequence |

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| 24 | 6.8 | 68.0 | 11 | 6 | AX592412 Sequence |
| 25 | 6.8 | 68.0 | 11 | 6 | AX592420 Sequence |
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| 77 | 6.8 | 68.0 | 15 | 6 | IS7795 Sequence 33 |
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| 81 | 6.8 | 68.0 | 15 | 6 | AX004379 Sequence |
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| 83 | 6.8 | 68.0 | 15 | 6 | AX663401 Sequence |
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ALIGNMENTS

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 LOCUS AX592372 10 bp DNA linear PAT 27-JAN-2003
 DEFINITION Sequence 62 from Patent WO02052002.
 ACCESSION AX592372
 VERSION AX592372.1 GI:27950474
 KEYWORDS
 SOURCE synthetic construct
 ORGANISM synthetic construct
 other sequences; artificial sequences.
 REFERENCE 1
 AUTHORS Fearon,K.L. and Dina,D.
 TITLE Immunomodulatory polynucleotides and methods of using the same
 JOURNAL Patent: WO 02052002-A 62 04-JUL-2002;
 Dynavax Technologies Corporation (US)
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 /mol_type="unassigned DNA"
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 /note="Polynucleotide containing CG"
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Qy 2 DANCCKTCG 10
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 Db 2 DANCCKTCG 10

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 AX592373
 LOCUS AX592373 10 bp DNA linear PAT 27-JAN-2003
 DEFINITION Sequence 63 from Patent WO02052002.
 ACCESSION AX592373
 VERSION AX592373.1 GI:27950475
 KEYWORDS
 SOURCE synthetic construct
 ORGANISM synthetic construct
 other sequences; artificial sequences.
 REFERENCE 1
 AUTHORS Fearon,K.L. and Dina,D.
 TITLE Immunomodulatory polynucleotides and methods of using the same
 JOURNAL Patent: WO 02052002-A 63 04-JUL-2002;
 Dynavax Technologies Corporation (US)
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 DEFINITION Sequence 64 from Patent WO02052002.
 ACCESSION AX592374
 VERSION AX592374.1 GI:27950476
 KEYWORDS
 SOURCE synthetic construct
 ORGANISM synthetic construct
 other sequences; artificial sequences.
 REFERENCE 1
 AUTHORS Fearon,K.L. and Dina,D.
 TITLE Immunomodulatory polynucleotides and methods of using the same
 JOURNAL Patent: WO 02052002-A 64 04-JUL-2002;
 Dynavax Technologies Corporation (US)
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 DEFINITION Sequence 67 from Patent WO02052002.
 ACCESSION AX592377
 VERSION AX592377.1 GI:27950479
 KEYWORDS
 SOURCE synthetic construct
 ORGANISM synthetic construct
 other sequences; artificial sequences.
 REFERENCE 1
 AUTHORS Fearon,K.L. and Dina,D.
 TITLE Immunomodulatory polynucleotides and methods of using the same
 JOURNAL Patent: WO 02052002-A 67 04-JUL-2002;
 Dynavax Technologies Corporation (US)
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DEFINITION Sequence 68 from Patent WO02052002.
ACCESSION AX592378
VERSION AX592378.1 GI:27950480
KEYWORDS
SOURCE
ORGANISM
synthetic construct
other sequences; artificial sequences.
REFERENCE
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AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 68 04-JUL-2002;
Dynamax Technologies Corporation (US)
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RESULT 6
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LOCUS AX592379 10 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 69 from Patent WO02052002.
ACCESSION AX592379
VERSION AX592379.1 GI:27950481
KEYWORDS
SOURCE
ORGANISM
synthetic construct
other sequences; artificial sequences.
REFERENCE
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AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 69 04-JUL-2002;
Dynamax Technologies Corporation (US)
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Db 2 GACCGTTCG 10
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AX592380
LOCUS AX592380 10 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 70 from Patent WO02052002.
ACCESSION AX592380
VERSION AX592380.1 GI:27950482
KEYWORDS
SOURCE
ORGANISM
synthetic construct
other sequences; artificial sequences.

REFERENCE
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AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 70 04-JUL-2002;
Dynamax Technologies Corporation (US)
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LOCUS AX592381 10 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 71 from Patent WO02052002.
ACCESSION AX592381
VERSION AX592381.1 GI:27950483
KEYWORDS
SOURCE
ORGANISM
synthetic construct
other sequences; artificial sequences.
REFERENCE
1
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 71 04-JUL-2002;
Dynamax Technologies Corporation (US)
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Db 2 GACCGTTCG 10
RESULT 9
AX592382
LOCUS AX592382 10 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 72 from Patent WO02052002.
ACCESSION AX592382
VERSION AX592382.1 GI:27950484
KEYWORDS
SOURCE
ORGANISM
synthetic construct
other sequences; artificial sequences.
REFERENCE
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AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 72 04-JUL-2002;
Dynamax Technologies Corporation (US)
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Best Local Similarity 66.7%; Pred. No. 9.7e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
Db 2 TAACGGTCG 10

RESULT 10
AX592383
LOCUS AX592383 10 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 73 from Patent WO02052002.
ACCESSION AX592383
VERSION AX592383.1 GI:27950485
KEYWORDS
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 73 04-JUL-2002;
Dynamax Technologies Corporation (US)
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Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
Db 2 TAACGGTCG 10

RESULT 11
AX592384
LOCUS AX592384 10 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 74 from Patent WO02052002.
ACCESSION AX592384
VERSION AX592384.1 GI:27950486
KEYWORDS
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 74 04-JUL-2002;
Dynamax Technologies Corporation (US)
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Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
Db 2 TAACGGTCG 10

RESULT 12
AX592385
LOCUS AX592385 10 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 75 from Patent WO02052002.
ACCESSION AX592385
VERSION AX592385.1 GI:27950487
KEYWORDS
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 75 04-JUL-2002;
Dynamax Technologies Corporation (US)
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Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
Db 2 TAACGGTCG 10

RESULT 13
AX592386
LOCUS AX592386 10 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 76 from Patent WO02052002.
ACCESSION AX592386
VERSION AX592386.1 GI:27950488
KEYWORDS
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 76 04-JUL-2002;
Dynamax Technologies Corporation (US)
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Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

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Db 2 TAACGGTCG 10

RESULT 14
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LOCUS AX592387 10 bp DNA linear PAT 27-JAN-2003

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| DEFINITION | Sequence 77 from Patent WO02052002. |
| ACCESSION | AX592387 |
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| KEYWORDS | synthetic construct other sequences; artificial sequences. |
| ORGANISM | 1 |
| REFERENCE | Fearon,K.L. and Dina,D. Immunomodulatory polynucleotides and methods of using the same Patent: WO 02052002-A 77 04-JUL-2002; Dynavax Technologies Corporation (US) |
| TITLE | JOURNAL |
| JOURNAL | Location/Qualifiers |
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| Db | 2 GAACGTTCG 10 |
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| DEFINITION | Sequence 77 from Patent WO02052002. |
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| VERSION | AX592387.1 GI:27950489 |
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| ORGANISM | Fearon,K.L. and Dina,D. Immunomodulatory polynucleotides and methods of using the same Patent: WO 02052002-A 77 04-JUL-2002; Dynavax Technologies Corporation (US) |
| REFERENCE | JOURNAL |
| AUTHORS | Location/Qualifiers |
| TITLE | 1..10 /organism="synthetic construct" /mol_type="unassigned DNA" /db_xref="taxon:32630" /note="Polynucleotide containing CG" |
| JOURNAL | |
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| Best Local Similarity | 66.7%; Pred.No. 9.7e+05; |
| Matches | 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0; |
| Qy | 2 DANCGKTCG 10 : : |
| Db | 9 GAACGTTCG 1 |
| RESULT 16 | |
| AX592388 | |
| LOCUS | AX592388 10 bp DNA linear PAT 27-JAN-2003 |
| DEFINITION | Sequence 78 from Patent WO02052002. |
| ACCESSION | AX592388 |
| VERSION | AX592388.1 GI:27950490 |
| KEYWORDS | synthetic construct synthetic construct other sequences; artificial sequences. |
| SOURCE | 1 |
| ORGANISM | Fearon,K.L. and Dina,D. Immunomodulatory polynucleotides and methods of using the same Patent: WO 02052002-A 79 04-JUL-2002; Dynavax Technologies Corporation (US) |
| REFERENCE | JOURNAL |
| AUTHORS | Location/Qualifiers |
| TITLE | 1..10 /organism="synthetic construct" /mol_type="unassigned DNA" /db_xref="taxon:32630" /note="Polynucleotide containing CG" |
| JOURNAL | |
| FEATURES | 1 |
| source | |
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| Query Match | 68.0%; Score 6.8; DB 6; Length 10; |
| Best Local Similarity | 66.7%; Pred.No. 9.7e+05; |
| Matches | 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0; |
| Qy | 2 DANCGKTCG 10 : : |
| Db | 9 GAACGTTCG 1 |
| RESULT 17 | |
| AX592388/c | |
| LOCUS | AX592388 10 bp DNA linear PAT 27-JAN-2003 |
| DEFINITION | Sequence 78 from Patent WO02052002. |
| ACCESSION | AX592388 |
| VERSION | AX592388.1 GI:27950490 |
| KEYWORDS | synthetic construct synthetic construct other sequences; artificial sequences. |
| SOURCE | 1 |
| ORGANISM | Fearon,K.L. and Dina,D. Immunomodulatory polynucleotides and methods of using the same Patent: WO 02052002-A 78 04-JUL-2002; Dynavax Technologies Corporation (US) |
| REFERENCE | JOURNAL |
| AUTHORS | Location/Qualifiers |
| TITLE | 1..10 /organism="synthetic construct" /mol_type="unassigned DNA" /db_xref="taxon:32630" /note="Polynucleotide containing CG" |
| JOURNAL | |
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| Query Match | 68.0%; Score 6.8; DB 6; Length 10; |
| Best Local Similarity | 66.7%; Pred.No. 9.7e+05; |
| Matches | 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0; |
| Qy | 2 DANCGKTCG 10 : : |
| Db | 9 GAACGTTCG 1 |
| RESULT 18 | |
| AX592389 | |
| LOCUS | AX592389 10 bp DNA linear PAT 27-JAN-2003 |
| DEFINITION | Sequence 79 from Patent WO02052002. |
| ACCESSION | AX592389 |
| VERSION | AX592389.1 GI:27950491 |
| KEYWORDS | synthetic construct synthetic construct other sequences; artificial sequences. |
| SOURCE | 1 |
| ORGANISM | Fearon,K.L. and Dina,D. Immunomodulatory polynucleotides and methods of using the same Patent: WO 02052002-A 79 04-JUL-2002; Dynavax Technologies Corporation (US) |
| REFERENCE | JOURNAL |
| AUTHORS | Location/Qualifiers |
| TITLE | 1..10 /organism="synthetic construct" /mol_type="unassigned DNA" /db_xref="taxon:32630" /note="Polynucleotide containing CG" |
| JOURNAL | |
| FEATURES | 1 |
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| Best Local Similarity | 66.7%; Pred.No. 9.7e+05; |
| Matches | 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0; |
| Qy | 2 DANCGKTCG 10 : : |
| Db | 9 GAACGTTCG 1 |

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misc_feature 1
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Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
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Db 2 GAACGTCG 10

RESULT 19
AX592390
LOCUS AX592390 10 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 80 from Patent WO02052002.
ACCESSION AX592390
VERSION AX592390.1 GI:27950492
KEYWORDS
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE
1 Fearon,K.L. and Dina,D.
AUTHORS Immunomodulatory polynucleotides and methods of using the same
TITLE Patent: WO 02052002-A 80 04-JUL-2002;
JOURNAL Dynavax Technologies Corporation (US)
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/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Polynucleotide containing CG"

ORIGIN
Query Match      68.0%; Score 6.8; DB 6; Length 10;
Best Local Similarity 66.7%; Pred. No. 9.7e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
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Db 2 GAACGTCG 10

RESULT 20
AX592391
LOCUS AX592391 10 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 81 from Patent WO02052002.
ACCESSION AX592391
VERSION AX592391.1 GI:27950493
KEYWORDS
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE
1 Fearon,K.L. and Dina,D.
AUTHORS Immunomodulatory polynucleotides and methods of using the same
TITLE Patent: WO 02052002-A 81 04-JUL-2002;
JOURNAL Dynavax Technologies Corporation (US)
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source
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/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Polynucleotide containing CG"

ORIGIN
Query Match      68.0%; Score 6.8; DB 6; Length 10;
Best Local Similarity 66.7%; Pred. No. 9.7e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
   :|||:||||
Db 2 GAACGTCG 10

RESULT 21
AX592392
LOCUS AX592392 10 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 82 from Patent WO02052002.
ACCESSION AX592392
VERSION AX592392.1 GI:27950494
KEYWORDS
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE
1 Fearon,K.L. and Dina,D.
AUTHORS Immunomodulatory polynucleotides and methods of using the same
TITLE Patent: WO 02052002-A 82 04-JUL-2002;
JOURNAL Dynavax Technologies Corporation (US)
FEATURES
source
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/organism="synthetic construct"
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/note="Polynucleotide containing CG"

ORIGIN
Query Match      68.0%; Score 6.8; DB 6; Length 10;
Best Local Similarity 66.7%; Pred. No. 9.7e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
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Db 2 GAACGTCG 10

RESULT 22
AX592443
LOCUS AX592443 10 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 133 from Patent WO02052002.
ACCESSION AX592443
VERSION AX592443.1 GI:27950545
KEYWORDS
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE
1 Fearon,K.L. and Dina,D.
AUTHORS Immunomodulatory polynucleotides and methods of using the same
TITLE Patent: WO 02052002-A 133 04-JUL-2002;
JOURNAL Dynavax Technologies Corporation (US)
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source
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/organism="synthetic construct"
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/note="Polynucleotide containing CG"

misc_feature 1
misc_feature 4
/note="n= t, c, or 5-bromocytosine"

ORIGIN
Query Match      68.0%; Score 6.8; DB 6; Length 10;
Best Local Similarity 100.0%; Pred. No. 9.7e+05;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
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Db 2 DANCCKTCG 10

RESULT 23

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AX592412
LOCUS AX592412 11 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 102 from Patent WO02052002.
ACCESSION AX592412
VERSION AX592412.1 GI:27950514
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
other sequences; artificial sequences.
REFERENCE 1
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 102 04-JUL-2002;
Dynavax Technologies Corporation (US)
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/db_xref="taxon:32630"
/note="Polynucleotide containing CG"
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Best Local Similarity 66.7%; Pred. No. 9.7e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
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Db 3 GAACGTCG 11
RESULT 24
AX592412/c
LOCUS AX592412 11 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 102 from Patent WO02052002.
ACCESSION AX592412
VERSION AX592412.1 GI:27950514
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
other sequences; artificial sequences.
REFERENCE 1
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 102 04-JUL-2002;
Dynavax Technologies Corporation (US)
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/note="Polynucleotide containing CG"
ORIGIN
Query Match 68.0%; Score 6.8; DB 6; Length 11;
Best Local Similarity 66.7%; Pred. No. 9.7e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
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Db 3 GAACGTCG 11
RESULT 25
AX592420
LOCUS AX592420 11 bp DNA linear PAT 28-JAN-2003
DEFINITION Sequence 110 from Patent WO02052002.
ACCESSION AX592420
VERSION AX592420.1 GI:27950522
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
other sequences; artificial sequences.
REFERENCE 1
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 116 04-JUL-2002;
Dynavax Technologies Corporation (US)
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/organism="synthetic construct"
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REFERENCE 1
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 110 04-JUL-2002;
Dynavax Technologies Corporation (US)
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Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
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Db 3 GAACGTCG 11
RESULT 26
AX592420/c
LOCUS AX592420 11 bp DNA linear PAT 28-JAN-2003
DEFINITION Sequence 110 from Patent WO02052002.
ACCESSION AX592420
VERSION AX592420.1 GI:27950522
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
other sequences; artificial sequences.
REFERENCE 1
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 110 04-JUL-2002;
Dynavax Technologies Corporation (US)
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/note="Polynucleotide containing CG"
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Query Match 68.0%; Score 6.8; DB 6; Length 11;
Best Local Similarity 66.7%; Pred. No. 9.7e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
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Db 10 GAACGTCG 2
RESULT 27
AX592426
LOCUS AX592426 11 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 116 from Patent WO02052002.
ACCESSION AX592426
VERSION AX592426.1 GI:27950528
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
other sequences; artificial sequences.
REFERENCE 1
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 116 04-JUL-2002;
Dynavax Technologies Corporation (US)
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Query Match      68.0%; Score 6.8; DB 6; Length 11;
Best Local Similarity 66.7%; Pred. No. 9.7e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
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Db 3 GACCGTTCG 11

RESULT 28
LOCUS      AR176675          12 bp      DNA      linear      PAT 17-DEC-2001
DEFINITION Sequence 6 from patent US 6312894.
ACCESSION  AR176675
VERSION    AR176675.1 GI:17919030
KEYWORDS   Unknown.
SOURCE     Unknown.
ORGANISM   Unclassified.
REFERENCE  1 (bases 1 to 12)
AUTHORS    Hedgpeth,J., Afonina,I.A., Kutyavin,I.V., Lukhtanov,E.A.,
            Belousov,E.S. and Meyer,R.B. Jr.
TITLE      Hybridization and mismatch discrimination using oligonucleotides
            conjugated to minor groove binders
JOURNAL    Patent: US 6312894-A 6 06-NOV-2001;
FEATURES   Location/Qualifiers
            source          1..12
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Query Match      68.0%; Score 6.8; DB 6; Length 12;
Best Local Similarity 66.7%; Pred. No. 9.7e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
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Db 4 TAACGTCG 12

RESULT 29
LOCUS      BD192579          12 bp      DNA      linear      PAT 17-JUL-2003
DEFINITION Novel plasmids for plant transformation and method for using same.
ACCESSION  BD192579
VERSION    BD192579.1 GI:33002318
KEYWORDS   JP 2002514927-A/11.
SOURCE     synthetic construct
ORGANISM   synthetic construct
other sequences: artificial sequences.
REFERENCE  1 (bases 1 to 12)
AUTHORS    Stuiver,M.H., Ponstein,A.S., Ohl,S.A., Goddijn,O.J.M., Simons,L.H.,
            Dekker,B.M.M., Hoekstra,S., Tigelaar,H. and Elzinga,N.
TITLE      Novel plasmids for plant transformation and method for using same
JOURNAL    Patent: JP 2002514927-A 11 21-MAY-2002;
            MOGEN INTERNATIONAL NV
COMMENT    PN JP 2002514927-A/11
            PD 21-MAY-2002
            PF 29-JUN-1998 JP 1999508121
            PP 30-JUN-1997 EP 97201990.5
            PI MAARTEN HENDRIK STUIVER,ANNE SILENE PONSTEIN,STEPHAN ANDREAS
            PI OHL,
            PI OSCAR JOHANNA MARIA GODDIJN,LAMBERTUS HENRICUS SIMONS, PI
            BERNARDUS MARTINUS MARIA DEKKER,SIETSKES HOEKSTRA,HENDRIK PI
            TIGELAAR,
            PI NICOLAS ELZINGA
            PC C12N15/82,C12N15/63,A01H5/00

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CC Topology: Linear;
FH Key Location/Qualifiers
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Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
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Db 1 GATCGGTCG 9

RESULT 30
LOCUS      BD260026          12 bp      DNA      linear      PAT 17-JUL-2003
DEFINITION Hybridization and mismatch discrimination using oligonucleotides
            conjugated to minor groove binders.
ACCESSION  BD260026
VERSION    BD260026.1 GI:33069796
KEYWORDS   JP 2002527040-A/6.
SOURCE     Escherichia coli
ORGANISM   Escherichia coli
REFERENCE  1 (bases 1 to 12)
AUTHORS    Hedgpeth,J., Afonina,I.A., Kutyavin,I.V., Lukhtanov,E.A.,
            Belousov,E.S. and Jr.R.B.M.
TITLE      Hybridization and mismatch discrimination using oligonucleotides
            conjugated to minor groove binders
JOURNAL    Patent: JP 2002527040-A 6 27-AUG-2002;
            EPOCH BIOSCIENCES INC
COMMENT    OS Escherichia coli
            PN JP 2002527040-A/6
            PD 27-AUG-2002
            PF 05-APR-1999 JP 2000542342
            PR 03-APR-1998 US 09/054832
            PI JOEL HEDGPETH,IRINA A AFONINA,IGOR V KUTYAVIN,EUGENY A PI
            LUKHTANOV,
            PI EVGENIY S BELOUSOV,RICH B MEYER JR
            PC C12N15/09,C12N15/09,C07H21/02,C07H21/04,C12Q1/68,G01N21/78, PC
            G01N33/483,
            PC G01N33/53,G01N33/566,C12N15/00,C12N15/00
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Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
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Db 4 TAACGTCG 12

RESULT 31
AR437498/c

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LOCUS AR437498 12 bp DNA linear PAT 18-DEC-2003
DEFINITION Sequence 42 from patent US 6660475.
ACCESSION AR437498
VERSION AR437498.1 GI:40202572
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 12)
AUTHORS Jack,W.E., Schildkraut,I. and Menin,J.F.
TITLE Use of site-specific nicking endonucleases to create single-stranded regions and applications thereof
JOURNAL Patent: US 6660475-A 42 09-DEC-2003;
FEATURES
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/organism="unknown"
/mol_type="genomic DNA"
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Query Match 68.0%; Score 6.8; DB 6; Length 12;
Best Local Similarity 66.7%; Pred. No. 9.7e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
Qy 2 DANCCKTCG 10
Db 12 GAACGTCG 4
RESULT 32
AX001132
LOCUS AX001132 12 bp DNA linear PAT 10-MAR-2000
DEFINITION Sequence 11 from Patent WO9901563.
ACCESSION AX001132
VERSION AX001132.1 GI:7241331
KEYWORDS
SOURCE unidentified
ORGANISM unidentified
REFERENCE 1 (bases 1 to 12)
AUTHORS Goddijn,O.J. and Ohl,S.A.
TITLE PLASMIDS FOR PLANT TRANSFORMATION AND METHOD FOR USING THE SAME
JOURNAL Patent: WO 9901563-A 11 14-JAN-1999;
GODDIJN OSCAR JOHANNA MARIA (NL); OHL STEPHAN ANDREAS (NL)
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source 1. .12
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/mol_type="unassigned DNA"
/db_xref="taxon:32644"
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Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
Qy 2 DANCCKTCG 10
Db 1 GATCGGTCG 9
RESULT 33
AX592417
LOCUS AX592417 12 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 107 from Patent WO2052002.
ACCESSION AX592417
VERSION AX592417.1 GI:27950519
KEYWORDS
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 107 04-JUL-2002;

Dynavax Technologies Corporation (US)
Location/Qualifiers
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/mol_type="unassigned DNA"
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/note="Polynucleotide containing CG"
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Best Local Similarity 66.7%; Pred. No. 9.7e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
Qy 2 DANCCKTCG 10
Db 4 GAACGTCG 12
RESULT 34
AX592419
LOCUS AX592419 12 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 109 from Patent WO2052002.
ACCESSION AX592419
VERSION AX592419.1 GI:27950521
KEYWORDS
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 109 04-JUL-2002;
Dynavax Technologies Corporation (US)
Location/Qualifiers
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Best Local Similarity 66.7%; Pred. No. 9.7e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
Qy 2 DANCCKTCG 10
Db 4 TAACGTCG 12
RESULT 35
BD064849/c
LOCUS BD064849/c 12 bp DNA linear PAT 27-AUG-2002
DEFINITION Method for detecting the extent of binding of transcriptional regulatory protein to oligoDNA.
ACCESSION BD064849
VERSION BD064849.1 GI:22610452
KEYWORDS JP 2001275678-A/61.
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1 (bases 1 to 12)
AUTHORS Kishimoto,T., Niwa,S., Mori,Y., Sachiyo, Mimaki, Fukushima,R. and Nishikawa,K.
TITLE Method for detecting the extent of binding of transcriptional regulatory protein to oligoDNA
JOURNAL Patent: JP 2001275678-A 61 09-OCT-2001;
SUMITOMO ELECTRIC INDUSTRIES LTD
COMMENT OS Artificial Sequence
PN JP 2001275678-A/61
PD 09-OCT-2001
PF 31-MAR-2000 JP 2000096306
PI TOSHIOH KISHIMOTO,SHINICHIRO NIWA,YUKO MORI,SACHIYO PI

MIMAKI, REI FUKUSHIMA,
PI KAZUKO NISHIKAWA
PC C12N15/09, C12N5/10, C12Q1/00, C12Q1/68, C12N15/00, C12N5/00 CC
Synthetic DNA
PH Key Location/Qualifiers
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FEATURES
source

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 12;
Best Local Similarity 66.7%; Pred. No. 9.7e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
: |||: |||
Db 12 AACCGTTCG 4

RESULT 36
AX592407
LOCUS AX592407 13 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 97 from Patent WO02052002.
ACCESSION AX592407
VERSION AX592407.1 GI:27950509
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1
AUTHORS Fearon, K.L. and Dina, D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 97 04-JUL-2002;
DynaVax Technologies Corporation (US)
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source Location/Qualifiers
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/note='Polynucleotide containing CG'

Query Match 68.0%; Score 6.8; DB 6; Length 13;
Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
: |||: |||
Db 5 GAACGTTTCG 13

RESULT 37
AX592407/C
LOCUS AX592407 13 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 97 from Patent WO02052002.
ACCESSION AX592407
VERSION AX592407.1 GI:27950509
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1
AUTHORS Fearon, K.L. and Dina, D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 97 04-JUL-2002;
DynaVax Technologies Corporation (US)
FEATURES
source Location/Qualifiers
1. .13
/organism='synthetic construct'

/mol_type='unassigned DNA'
/db_xref='taxon:32630'
/note='Polynucleotide containing CG'

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 13;
Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
: |||: |||
Db 12 GAACGTTTCG 4

RESULT 38
AX592409
LOCUS AX592409 13 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 99 from Patent WO02052002.
ACCESSION AX592409
VERSION AX592409.1 GI:27950511
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1
AUTHORS Fearon, K.L. and Dina, D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 99 04-JUL-2002;
DynaVax Technologies Corporation (US)
FEATURES
source Location/Qualifiers
1. .13
/organism='synthetic construct'
/mol_type='unassigned DNA'
/db_xref='taxon:32630'
/note='Polynucleotide containing CG'
misc_feature 2
/note='n = 5-bromocytosine'

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 13;
Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
: |||: |||
Db 5 GAACGTTTCG 13

RESULT 39
AX592409/C
LOCUS AX592409 13 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 99 from Patent WO02052002.
ACCESSION AX592409
VERSION AX592409.1 GI:27950511
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1
AUTHORS Fearon, K.L. and Dina, D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 99 04-JUL-2002;
DynaVax Technologies Corporation (US)
FEATURES
source Location/Qualifiers
1. .13
/organism='synthetic construct'
/mol_type='unassigned DNA'
/db_xref='taxon:32630'
/note='Polynucleotide containing CG'
misc_feature 2
/note='n = 5-bromocytosine'

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 13;
 Best Local Similarity 66.7%; Pred. No. 9.6e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 :|||:||||
 Db 12 GAACGTCG 4

RESULT 40

AX592411 LOCUS AX592411 13 bp DNA linear PAT 27-JAN-2003
 DEFINITION Sequence 101 from Patent WO02052002.
 ACCESSION AX592411
 VERSION AX592411.1 GI:27950513

KEYWORDS synthetic construct
 SOURCE synthetic construct
 ORGANISM other sequences; artificial sequences.

REFERENCE 1
 AUTHORS Fearon, K.L. and Dina, D.
 TITLE Immunomodulatory polynucleotides and methods of using the same
 JOURNAL Patent: WO 02052002-A 101 04-JUL-2002;
 DYNAX Technologies Corporation (US)

FEATURES
 source Location/Qualifiers
 1..13
 /organism="synthetic construct"
 /mol_type="unassigned DNA"
 /db_xref="taxon:32630"
 /note="Polynucleotide containing CG"

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 13;
 Best Local Similarity 66.7%; Pred. No. 9.6e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 :|||:||||
 Db 5 TAACGTCG 13

RESULT 41

AX592413 LOCUS AX592413 13 bp DNA linear PAT 27-JAN-2003
 DEFINITION Sequence 103 from Patent WO02052002.
 ACCESSION AX592413
 VERSION AX592413.1 GI:27950515

KEYWORDS synthetic construct
 SOURCE synthetic construct
 ORGANISM other sequences; artificial sequences.

REFERENCE 1
 AUTHORS Fearon, K.L. and Dina, D.
 TITLE Immunomodulatory polynucleotides and methods of using the same
 JOURNAL Patent: WO 02052002-A 103 04-JUL-2002;
 DYNAX Technologies Corporation (US)

FEATURES
 source Location/Qualifiers
 1..13
 /organism="synthetic construct"
 /mol_type="unassigned DNA"
 /db_xref="taxon:32630"
 /note="Polynucleotide containing CG"

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 13;
 Best Local Similarity 66.7%; Pred. No. 9.6e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 :|||:||||
 Db 5 GAACGTCG 13

RESULT 42

AX592414 LOCUS AX592414 13 bp DNA linear PAT 27-JAN-2003
 DEFINITION Sequence 104 from Patent WO02052002.
 ACCESSION AX592414
 VERSION AX592414.1 GI:27950516

KEYWORDS synthetic construct
 SOURCE synthetic construct
 ORGANISM other sequences; artificial sequences.

REFERENCE 1
 AUTHORS Fearon, K.L. and Dina, D.
 TITLE Immunomodulatory polynucleotides and methods of using the same
 JOURNAL Patent: WO 02052002-A 104 04-JUL-2002;
 DYNAX Technologies Corporation (US)

FEATURES
 source Location/Qualifiers
 1..13
 /organism="synthetic construct"
 /mol_type="unassigned DNA"
 /db_xref="taxon:32630"
 /note="Polynucleotide containing CG"

ORIGIN
 Query Match 68.0%; Score 6.8; DB 6; Length 13;
 Best Local Similarity 66.7%; Pred. No. 9.6e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 :|||:||||
 Db 5 TATCGTCG 13

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 13;
 Best Local Similarity 66.7%; Pred. No. 9.6e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 :|||:||||
 Db 5 TATCGTCG 13

RESULT 43

AX592415 LOCUS AX592415 13 bp DNA linear PAT 27-JAN-2003
 DEFINITION Sequence 105 from Patent WO02052002.
 ACCESSION AX592415
 VERSION AX592415.1 GI:27950517

KEYWORDS synthetic construct
 SOURCE synthetic construct
 ORGANISM other sequences; artificial sequences.

REFERENCE 1
 AUTHORS Fearon, K.L. and Dina, D.
 TITLE Immunomodulatory polynucleotides and methods of using the same
 JOURNAL Patent: WO 02052002-A 105 04-JUL-2002;
 DYNAX Technologies Corporation (US)

FEATURES
 source Location/Qualifiers
 1..13
 /organism="synthetic construct"
 /mol_type="unassigned DNA"
 /db_xref="taxon:32630"
 /note="Polynucleotide containing CG"

ORIGIN
 Query Match 68.0%; Score 6.8; DB 6; Length 13;
 Best Local Similarity 66.7%; Pred. No. 9.6e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 :|||:||||
 Db 5 TACCGTCG 13

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 13;
 Best Local Similarity 66.7%; Pred. No. 9.6e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 :|||:||||
 Db 5 TACCGTCG 13

RESULT 44

AX592416 LOCUS AX592416 13 bp DNA linear PAT 27-JAN-2003
 DEFINITION Sequence 106 from Patent WO02052002.
 ACCESSION AX592416
 VERSION AX592416.1 GI:27950518

KEYWORDS synthetic construct
 SOURCE synthetic construct
 ORGANISM other sequences; artificial sequences.

REFERENCE 1
 AUTHORS Fearon, K.L. and Dina, D.
 TITLE Immunomodulatory polynucleotides and methods of using the same
 JOURNAL Patent: WO 02052002-A 106 04-JUL-2002;
 DYNAX Technologies Corporation (US)

FEATURES
 source Location/Qualifiers
 1..13
 /organism="synthetic construct"
 /mol_type="unassigned DNA"
 /db_xref="taxon:32630"
 /note="Polynucleotide containing CG"

ORIGIN
 Query Match 68.0%; Score 6.8; DB 6; Length 13;
 Best Local Similarity 66.7%; Pred. No. 9.6e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

other sequences; artificial sequences.

REFERENCE

1 Fearon,K.L. and Dina,D.
Immunomodulatory polynucleotides and methods of using the same
Patent: WO 02052002-A 106 04-JUL-2002;
Dynavax Technologies Corporation (US)

FEATURES

source
1. .13
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Polynucleotide containing CG"

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 13;
Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGKTCG 10
: |||: |||
Db 5 AACCGTTCG 13

RESULT 45

AX592422 13 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 112 from Patent WO02052002.
ACCESSION AX592422
VERSION AX592422.1 GI:27950524
KEYWORDS
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.

REFERENCE

1 Fearon,K.L. and Dina,D.
Immunomodulatory polynucleotides and methods of using the same
Patent: WO 02052002-A 112 04-JUL-2002;
Dynavax Technologies Corporation (US)

FEATURES

source
1. .13
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Polynucleotide containing CG"
misc_feature 2
/note="n = 5-bromocytosine"

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 13;
Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGKTCG 10
: |||: |||
Db 5 GAACGTTCG 13

RESULT 46

BD091727 13 bp DNA linear PAT 27-AUG-2002
LOCUS Trap vector and gene trapping method by using the same.
DEFINITION BD091727
ACCESSION BD091727
VERSION BD091727.1 GI:22637338
KEYWORDS WO 0105987-A/1.
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.

REFERENCE

1 Yamamura,K. and Araki,K.
Trap vector and gene trapping method by using the same
Patent: WO 0105987-A 1 25-JAN-2001;
KUMAMOTO TECHNOLOGIES FOUNDATION,KENICHI YAMAMURA,KIMI ARAKI
OS Artificial Sequence

PN WO 0105987-A/1
PD 25-JAN-2001
PF 02-MAY-2000 WO 2000JP002916
PR 14-JUL-1999 JP 99P 200997
PI KENICHI YAMAMURA,KIMI ARAKI
PC C12N15/85,A01K67/027
CC Description of Artificial Sequence:synthetic DNA FH Key
Location/Qualifiers
1. .13
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"

FEATURES

source

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 13;
Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGKTCG 10
: |||: |||
Db 1 TACCGTTCG 9

RESULT 47

BD091728/c 13 bp DNA linear PAT 27-AUG-2002
LOCUS Trap vector and gene trapping method by using the same.
DEFINITION BD091728
ACCESSION BD091728
VERSION BD091728.1 GI:22637339
KEYWORDS WO 0105987-A/2.
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1 (bases 1 to 13)
AUTHORS Yamamura,K. and Araki,K.
TITLE Trap vector and gene trapping method by using the same
JOURNAL Patent: WO 0105987-A 2 25-JAN-2001;
KUMAMOTO TECHNOLOGIES FOUNDATION,KENICHI YAMAMURA,KIMI ARAKI
COMMENT OS Artificial Sequence
PN WO 0105987-A/2
PD 25-JAN-2001
PF 02-MAY-2000 WO 2000JP002916
PR 14-JUL-1999 JP 99P 200997
PI KENICHI YAMAMURA,KIMI ARAKI
PC C12N15/85,A01K67/027
CC Description of Artificial Sequence:synthetic DNA FH Key
Location/Qualifiers
1. .13
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"

FEATURES

source

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 13;
Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGKTCG 10
: |||: |||
Db 13 TACCGTTCG 5

RESULT 48

BD192321 14 bp DNA linear PAT 17-JUL-2003
LOCUS Hammerhead ribozymes with extended cleavage rule.
DEFINITION BD192321
ACCESSION BD192321
VERSION BD192321.1 GI:33002060
KEYWORDS JP 2002510207-A/4.
SOURCE unidentified
ORGANISM unidentified

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unclassified.
1 (bases 1 to 14)
AUTHORS Ludvig, J. and Sproat, B.S.
TITLE Hammerhead ribozymes with extended cleavage rule
JOURNAL Patent: JP 2002510207-A 4 02-APR-2002;
COMMENT INNOVIR LABORATORIES INC
PN JP 2002510207-A/4
PD 02-APR-2002
PF 17-JUN-1998 JP 1999504776
PR 19-JUN-1997 US 878640
PI JANOS LUDWIG, BRIAN S SPROAT
PC C12N15/11, C12N9/00, C07H21/00, A61K31/70//C12Q1/68 CC
Strandedness: Single;
CC Topology: Linear;
FH Key Location/Qualifiers.
FEATURES
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        /mol_type="genomic DNA"
        /db_xref="taxon:32644"
ORIGIN
Query Match 68.0%; Score 6.8; DB 6; Length 14;
Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
   :|||:||||
Db 4 TACCGGTCG 12

RESULT 49
BD209265
LOCUS 14 bp RNA linear PAT 17-JUL-2003
DEFINITION Enzymatic nucleic acid treatment of diseases or conditions related
to hepatitis C virus infection.
ACCESSION BD209265.1 GI:33019035
VERSION JP 2002512791-A/2855.
KEYWORDS unidentified
SOURCE unclassified
ORGANISM unclassified.
REFERENCE 1 (bases 1 to 14)
AUTHORS Blatt, L., McSwiggen, J.A., Roberts, E., Pavco, P.A. and Macejak, D.
TITLE Enzymatic nucleic acid treatment of diseases or conditions related
to hepatitis C virus infection
JOURNAL Patent: JP 2002512791-A 2855 08-MAY-2002;
COMMENT OS Hepatitis virus (hepatitis C virus)
PN JP 2002512791-A/2855
PD 08-MAY-2002
PF 26-APR-1999 JP 2000545991
PR 27-APR-1998 US 60/083217, 18-SEP-1998 US 60/100842 PR
25-FEB-1999 US 09/257608, 23-MAR-1999 US 09/274553 PI
LAWRENCE BLATT, JAMES A MCSWIGGEN, ELISABETH ROBERTS, PAMELA A PI
PAVCO,
PI DENNIS MACEJAK
PC C12N9/00, A61K31/7105, A61K38/21, A61K48/00, A61P31/12, C12N15/09,
A61K37/66,
PC C12N15/00
CC Enzymatic nucleic acid treatment of diseases or conditions CC
related to
CC hepatitis C virus infection.
FH Key Location/Qualifiers
FT source 1..14
/organism="unidentified"
/organism="Hepatitis virus (hepatitis C FT
virus)"
FEATURES
    source
        1..14
        /organism="unidentified"
        /mol_type="genomic RNA"
        /db_xref="taxon:32644"
ORIGIN

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unclassified.
1 (bases 1 to 14)
AUTHORS Ludvig, J. and Sproat, B.S.
TITLE Hammerhead ribozymes with extended cleavage rule
JOURNAL Patent: JP 2002510207-A 4 02-APR-2002;
COMMENT INNOVIR LABORATORIES INC
PN JP 2002510207-A/4
PD 02-APR-2002
PF 17-JUN-1998 JP 1999504776
PR 19-JUN-1997 US 878640
PI JANOS LUDWIG, BRIAN S SPROAT
PC C12N15/11, C12N9/00, C07H21/00, A61K31/70//C12Q1/68 CC
Strandedness: Single;
CC Topology: Linear;
FH Key Location/Qualifiers.
FEATURES
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        /organism="unidentified"
        /mol_type="genomic DNA"
        /db_xref="taxon:32644"
ORIGIN
Query Match 68.0%; Score 6.8; DB 6; Length 14;
Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
   :|||:||||
Db 1 GAACGGTCG 9

RESULT 50
BD209302/c
LOCUS 14 bp RNA linear PAT 17-JUL-2003
DEFINITION Enzymatic nucleic acid treatment of diseases or conditions related
to hepatitis C virus infection.
ACCESSION BD209302.1 GI:33019072
VERSION JP 2002512791-A/2892.
KEYWORDS unidentified
SOURCE unclassified
ORGANISM unclassified.
REFERENCE 1 (bases 1 to 14)
AUTHORS Blatt, L., McSwiggen, J.A., Roberts, E., Pavco, P.A. and Macejak, D.
TITLE Enzymatic nucleic acid treatment of diseases or conditions related
to hepatitis C virus infection
JOURNAL Patent: JP 2002512791-A 2892 08-MAY-2002;
COMMENT OS Hepatitis virus (hepatitis C virus)
PN JP 2002512791-A/2892
PD 08-MAY-2002
PF 26-APR-1999 JP 2000545991
PR 27-APR-1998 US 60/083217, 18-SEP-1998 US 60/100842 PR
25-FEB-1999 US 09/257608, 23-MAR-1999 US 09/274553 PI
LAWRENCE BLATT, JAMES A MCSWIGGEN, ELISABETH ROBERTS, PAMELA A PI
PAVCO,
PI DENNIS MACEJAK
PC C12N9/00, A61K31/7105, A61K38/21, A61K48/00, A61P31/12, C12N15/09,
A61K37/66,
PC C12N15/00
CC Enzymatic nucleic acid treatment of diseases or conditions CC
related to
CC hepatitis C virus infection.
FH Key Location/Qualifiers
FT source 1..14
/organism="unidentified"
/organism="Hepatitis virus (hepatitis C FT
virus)"
FEATURES
    source
        1..14
        /organism="unidentified"
        /mol_type="genomic RNA"
        /db_xref="taxon:32644"
ORIGIN
Query Match 68.0%; Score 6.8; DB 6; Length 14;
Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
   :|||:||||
Db 9 GATCGGTCG 1

RESULT 51
AR234359
LOCUS 14 bp DNA linear PAT 20-DEC-2002
DEFINITION Sequence 13 from patent US 6458567.
ACCESSION AR234359
VERSION AR234359.1 GI:27277047
KEYWORDS Unknown.
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 14)

```

AUTHORS Barber,J.R., Welch,P.J., Tritz,R., Yei,S. and Yu,M.
 TITLE Hepatitis C Virus ribozymes
 JOURNAL Patent: US 6458567-A 13 01-OCT-2002;
 FEATURES Location/Qualifiers
 source
 1. .14
 /organism="unknown"
 /mol_type="genomic DNA"

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 14;
 Best Local Similarity 66.7%; Pred. No. 9.6e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 :|||:||||
 Db 1 GACCGGTCG 9

RESULT 52

AR370464
 LOCUS AR370464 14 bp RNA linear PAT 12-SEP-2003
 DEFINITION Sequence 4 from patent US 6300483.
 ACCESSION AR370464
 VERSION AR370464.1 GI:34607163
 KEYWORDS
 SOURCE Unknown.
 ORGANISM Unknown.

REFERENCE 1 (bases 1 to 14)

AUTHORS Ludwig,J. and Sprout,B.S.
 TITLE Compositions inducing cleavage of RNA motifs
 JOURNAL Patent: US 6300483-A 4 09-OCT-2001;
 FEATURES Location/Qualifiers
 source
 1. .14
 /organism="unknown"
 /mol_type="unassigned RNA"

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 14;
 Best Local Similarity 66.7%; Pred. No. 9.6e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 :|||:||||
 Db 4 TACCGGTCG 12

RESULT 53

AX592408
 LOCUS AX592408 14 bp DNA linear PAT 27-JAN-2003
 DEFINITION Sequence 98 from Patent WO02052002.
 ACCESSION AX592408
 VERSION AX592408.1 GI:27950510
 KEYWORDS
 SOURCE synthetic construct
 ORGANISM other sequences; artificial sequences.

REFERENCE 1

AUTHORS Fearon,K.L. and Dina,D.
 TITLE Immunomodulatory polynucleotides and methods of using the same
 JOURNAL Patent: WO 02052002-A 98 04-JUL-2002;
 DYNAVAX Technologies Corporation (US)
 FEATURES Location/Qualifiers
 source
 1. .14
 /organism="synthetic construct"
 /mol_type="unassigned DNA"
 /db_xref="taxon:32630"
 /note="Polynucleotide containing CG"

Query Match 68.0%; Score 6.8; DB 6; Length 14;
 Best Local Similarity 66.7%; Pred. No. 9.6e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

ORIGIN

QY 2 DANCCKTCG 10
 :|||:||||
 Db 6 GACCGGTCG 14

QY 2 DANCCKTCG 10
 :|||:||||
 Db 6 GACCGGTCG 14

RESULT 54

AX592408/c
 LOCUS AX592408 14 bp DNA linear PAT 27-JAN-2003
 DEFINITION Sequence 98 from Patent WO02052002.
 ACCESSION AX592408
 VERSION AX592408.1 GI:27950510
 KEYWORDS
 SOURCE synthetic construct
 ORGANISM other sequences; artificial sequences.

REFERENCE 1

AUTHORS Fearon,K.L. and Dina,D.
 TITLE Immunomodulatory polynucleotides and methods of using the same
 JOURNAL Patent: WO 02052002-A 98 04-JUL-2002;
 DYNAVAX Technologies Corporation (US)
 FEATURES Location/Qualifiers
 source
 1. .14
 /organism="synthetic construct"
 /mol_type="unassigned DNA"
 /db_xref="taxon:32630"
 /note="Polynucleotide containing CG"

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 14;
 Best Local Similarity 66.7%; Pred. No. 9.6e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 :|||:||||
 Db 13 GACCGGTCG 5

RESULT 55

AX592410
 LOCUS AX592410 14 bp DNA linear PAT 27-JAN-2003
 DEFINITION Sequence 100 from Patent WO02052002.
 ACCESSION AX592410
 VERSION AX592410.1 GI:27950512
 KEYWORDS
 SOURCE synthetic construct
 ORGANISM other sequences; artificial sequences.

REFERENCE 1

AUTHORS Fearon,K.L. and Dina,D.
 TITLE Immunomodulatory polynucleotides and methods of using the same
 JOURNAL Patent: WO 02052002-A 100 04-JUL-2002;
 DYNAVAX Technologies Corporation (US)
 FEATURES Location/Qualifiers
 source
 1. .14
 /organism="synthetic construct"
 /mol_type="unassigned DNA"
 /db_xref="taxon:32630"
 /note="Polynucleotide containing CG"

misc_feature 2

misc_feature 5

Query Match 68.0%; Score 6.8; DB 6; Length 14;
 Best Local Similarity 66.7%; Pred. No. 9.6e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

ORIGIN

QY 2 DANCCKTCG 10
 :|||:||||
 Db 6 GACCGGTCG 14


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RESULT 56
AX592421
LOCUS AX592421 14 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 111 from Patent WO02052002.
ACCESSION AX592421
VERSION AX592421.1 GI:27950523
KEYWORDS
SOURCE
ORGANISM synthetic construct
other sequences; artificial sequences.
REFERENCE
1
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 111 04-JUL-2002;
DynaVax Technologies Corporation (US)
FEATURES
SOURCE
1..14
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/notes="Polynucleotide containing CG"
ORIGIN
Query Match 68.0%; Score 6.8; DB 6; Length 14;
Best Local Similarity 66.7%; Pred. NO. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
Db 6 GACCGTTCG 14
RESULT 57
AX592421/C
LOCUS AX592421 14 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 111 from Patent WO02052002.
ACCESSION AX592421
VERSION AX592421.1 GI:27950523
KEYWORDS
SOURCE
ORGANISM synthetic construct
other sequences; artificial sequences.
REFERENCE
1
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 111 04-JUL-2002;
DynaVax Technologies Corporation (US)
FEATURES
SOURCE
1..14
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/notes="Polynucleotide containing CG"
ORIGIN
Query Match 68.0%; Score 6.8; DB 6; Length 14;
Best Local Similarity 66.7%; Pred. NO. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
Db 6 GACCGTTCG 14
RESULT 58
AX592428
LOCUS AX592428 14 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 118 from Patent WO02052002.
ACCESSION AX592428
VERSION AX592428.1 GI:27950530
KEYWORDS
SOURCE
ORGANISM synthetic construct
other sequences; artificial sequences.
REFERENCE
1 (bases 1 to 15)
AUTHORS Ikehara,M. and Kida,M.
TITLE Synthetic gene for human lysozyme

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```

ORGANISM synthetic construct
other sequences; artificial sequences.
REFERENCE
1
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 118 04-JUL-2002;
DynaVax Technologies Corporation (US)
FEATURES
SOURCE
1..14
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/notes="Polynucleotide containing CG"
misc_feature 5
/notes="n = 5-bromocytosine"
ORIGIN
Query Match 68.0%; Score 6.8; DB 6; Length 14;
Best Local Similarity 66.7%; Pred. NO. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
Db 6 GACCGTTCG 14
RESULT 59
AX592429
LOCUS AX592429 14 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 119 from Patent WO02052002.
ACCESSION AX592429
VERSION AX592429.1 GI:27950531
KEYWORDS
SOURCE
ORGANISM synthetic construct
other sequences; artificial sequences.
REFERENCE
1
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 119 04-JUL-2002;
DynaVax Technologies Corporation (US)
FEATURES
SOURCE
1..14
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/notes="Polynucleotide containing CG"
misc_feature 5
/notes="n = 5-bromocytosine"
ORIGIN
Query Match 68.0%; Score 6.8; DB 6; Length 14;
Best Local Similarity 66.7%; Pred. NO. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
Db 6 GACCGTTCG 14
RESULT 60
AX1090
LOCUS AX1090 15 bp DNA linear PAT 03-DEC-1993
DEFINITION Oligonucleotide L10.
ACCESSION AX1090
VERSION AX1090.1 GI:490940
KEYWORDS
SOURCE
ORGANISM synthetic construct
other sequences; artificial sequences.
REFERENCE
1 (bases 1 to 15)
AUTHORS Ikehara,M. and Kida,M.
TITLE Synthetic gene for human lysozyme

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JOURNAL Patent: EP 0181634-A 34 21-MAY-1986;
Takeda Chemical Industries, Ltd
FEATURES
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    /organism="synthetic construct"
    /mol_type="unassigned DNA"
    /db_xref="taxon:32630"
ORIGIN
  Query Match
  Best Local Similarity 68.0%; Score 6.8; DB 6; Length 15;
  Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
  : |||:
Db 2 GAACGGTCG 10
  : |||:

RESULT 61
LOCUS AR033261 15 bp DNA linear PAT 29-SEP-1999
DEFINITION Sequence 27 from patent US 5869253.
ACCESSION AR033261
VERSION AR033261.1 GI:5948866
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 15)
AUTHORS Draper,K.G.
TITLE Method and reagent for inhibiting hepatitis C virus replication
JOURNAL Patent: US 5869253-A 27 09-FEB-1999;
FEATURES
  source
    1..15
    /organism="unknown"
    /mol_type="unassigned DNA"
ORIGIN
  Query Match
  Best Local Similarity 68.0%; Score 6.8; DB 6; Length 15;
  Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
  : |||:
Db 1 TAGCGTTCG 9
  : |||:

RESULT 62
LOCUS AR033565 15 bp DNA linear PAT 29-SEP-1999
DEFINITION Sequence 331 from patent US 5869253.
ACCESSION AR033565
VERSION AR033565.1 GI:5949170
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 15)
AUTHORS Draper,K.G.
TITLE Method and reagent for inhibiting hepatitis C virus replication
JOURNAL Patent: US 5869253-A 331 09-FEB-1999;
FEATURES
  source
    1..15
    /organism="unknown"
    /mol_type="unassigned DNA"
ORIGIN
  Query Match
  Best Local Similarity 68.0%; Score 6.8; DB 6; Length 15;
  Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
  : |||:
Db 1 GAACGGTCG 9
  : |||:

RESULT 63
LOCUS AR033566 15 bp DNA linear PAT 29-SEP-1999
DEFINITION Sequence 332 from patent US 5869253.
ACCESSION AR033566
VERSION AR033566.1 GI:5949171
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 15)
AUTHORS Draper,K.G.
TITLE Method and reagent for inhibiting hepatitis C virus replication
JOURNAL Patent: US 5869253-A 332 09-FEB-1999;
FEATURES
  source
    1..15
    /organism="unknown"
    /mol_type="unassigned DNA"
ORIGIN
  Query Match
  Best Local Similarity 68.0%; Score 6.8; DB 6; Length 15;
  Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
  : |||:
Db 1 TAGCGTTCG 9
  : |||:

RESULT 64
LOCUS AR113083 15 bp DNA linear PAT 16-MAY-2001
DEFINITION Sequence 27 from patent US 6132966.
ACCESSION AR113083
VERSION AR113083.1 GI:14093405
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 15)
AUTHORS Draper,K.G.
TITLE Method and reagent for inhibiting hepatitis C virus replication
JOURNAL Patent: US 6132966-A 27 17-OCT-2000;
FEATURES
  source
    1..15
    /organism="unknown"
    /mol_type="unassigned DNA"
ORIGIN
  Query Match
  Best Local Similarity 68.0%; Score 6.8; DB 6; Length 15;
  Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
  : |||:
Db 1 GAACGGTCG 9
  : |||:

RESULT 65
LOCUS AR113387 15 bp DNA linear PAT 16-MAY-2001
DEFINITION Sequence 331 from patent US 6132966.
ACCESSION AR113387
VERSION AR113387.1 GI:14093709
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 15)
AUTHORS Draper,K.G.
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TITLE Method and reagent for inhibiting hepatitis C virus replication
JOURNAL Patent: US 6132966-A 331 17-OCT-2000;
FEATURES Location/Qualifiers

source
1. .15
/organism="unknown"
/mol_type="unassigned DNA"

ORIGIN
Query Match 68.0%; Score 6.8; DB 6; Length 15;
Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
: || ||: |||
Db 2 TAGCGTTCG 10

RESULT 66
AR113388 LOCUS 15 bp DNA linear PAT 16-MAY-2001
DEFINITION Sequence 332 from patent US 6132966.
ACCESSION AR113388
VERSION AR113388.1 GI:14093710
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.

REFERENCE 1 (bases 1 to 15)
AUTHORS Draper, K.G.
TITLE Method and reagent for inhibiting hepatitis C virus replication
JOURNAL Patent: US 6132966-A 332 17-OCT-2000;
FEATURES Location/Qualifiers
source
1. .15
/organism="unknown"
/mol_type="unassigned DNA"

ORIGIN
Query Match 68.0%; Score 6.8; DB 6; Length 15;
Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
: || ||: |||
Db 1 TAGCGTTCG 9

RESULT 67
AR123874 LOCUS 15 bp DNA linear PAT 16-MAY-2001
DEFINITION Sequence 7 from patent US 6171821.
ACCESSION AR123874
VERSION AR123874.1 GI:14109235
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.

REFERENCE 1 (bases 1 to 15)
AUTHORS Korneluk, R.G., Holcik, M. and Liston, P.
TITLE XIAP IRES and uses thereof
JOURNAL Patent: US 6171821-A 7 09-JAN-2001;
FEATURES Location/Qualifiers
source
1. .15
/organism="unknown"
/mol_type="unassigned DNA"

ORIGIN
Query Match 68.0%; Score 6.8; DB 6; Length 15;
Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
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Db 7 TAGCGTTCG 15

RESULT 68
AR123875/c

LOCUS 15 bp DNA linear PAT 16-MAY-2001
DEFINITION Sequence 8 from patent US 6171821.
ACCESSION AR123875
VERSION AR123875.1 GI:14109236
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.

REFERENCE 1 (bases 1 to 15)
AUTHORS Korneluk, R.G., Holcik, M. and Liston, P.
TITLE XIAP IRES and uses thereof
JOURNAL Patent: US 6171821-A 8 09-JAN-2001;
FEATURES Location/Qualifiers
source
1. .15
/organism="unknown"
/mol_type="unassigned DNA"

ORIGIN
Query Match 68.0%; Score 6.8; DB 6; Length 15;
Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
: || ||: |||
Db 9 TAGCGGTCG 1

RESULT 69
AR123876/c

LOCUS 15 bp DNA linear PAT 16-MAY-2001
DEFINITION Sequence 9 from patent US 6171821.
ACCESSION AR123876
VERSION AR123876.1 GI:14109237
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.

REFERENCE 1 (bases 1 to 15)
AUTHORS Korneluk, R.G., Holcik, M. and Liston, P.
TITLE XIAP IRES and uses thereof
JOURNAL Patent: US 6171821-A 9 09-JAN-2001;
FEATURES Location/Qualifiers
source
1. .15
/organism="unknown"
/mol_type="unassigned DNA"

ORIGIN
Query Match 68.0%; Score 6.8; DB 6; Length 15;
Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
: || ||: |||
Db 9 TAGCGGTCG 1

RESULT 70
AR174756 LOCUS 15 bp DNA linear PAT 17-DEC-2001
DEFINITION Sequence 9 from patent US 6307036.
ACCESSION AR174756
VERSION AR174756.1 GI:17915076
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.

REFERENCE 1 (bases 1 to 15)
AUTHORS Milner, J. and Veldhoen, N.
TITLE Tumour suppressor gene

JOURNAL Patent: US 6307036-A 9 23-OCT-2001;
 FEATURES Location/Qualifiers
 source 1..15
 /organism="unknown"
 /mol_type="unassigned DNA"

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 15;
 Best Local Similarity 66.7%; Pred. No. 9.6e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANGGKTGC 10
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Db 5 AAGCGGTGC 13

RESULT 71
 BD206994
 LOCUS 15 bp RNA linear PAT 17-JUL-2003
 DEFINITION Enzymatic nucleic acid treatment of diseases or conditions related to hepatitis C virus infection.

ACCESSION BD206994
 VERSION BD206994.1 GI:33016764
 KEYWORDS JP 2002512791-A/584.
 SOURCE unidentified
 ORGANISM unclassified.

REFERENCE 1 (bases 1 to 15)
 AUTHORS Blatt,L., McSwiggen,J.A., Roberts,E., Pavco,P.A. and Macejak,D.
 TITLE Enzymatic nucleic acid treatment of diseases or conditions related to hepatitis C virus infection
 JOURNAL Patent: JP 2002512791-A 584 08-MAY-2002;
 COMMENT OS Hepatitis virus (hepatitis C virus)
 PN JP 2002512791-A/584
 PD 08-MAY-2002
 PF 26-APR-1999 JP 2000545991
 PR 27-APR-1998 US 60/083217,18-SEP-1998 US 60/100842 PR
 25-FEB-1999 US 09/257608,23-MAR-1999 US 09/274553 PI
 LAWRENCE BLATT,JAMES A MCSWIGGEN,ELISABETH ROBERTS,PAMELA A PI
 PAVCO,
 PI DENNIS MACEJAK
 PC C12N9/00,A61K31/7105,A61K38/21,A61K48/00,A61P31/12,C12N15/09,
 PC A61K37/66,
 PC C12N15/00
 CC Enzymatic nucleic acid treatment of diseases or conditions related to hepatitis C virus infection.
 CC hepatitis C virus infection.
 FH Key Location/Qualifiers
 FT source 1..15
 FT virus)

JOURNAL

COMMENT OS Hepatitis virus (hepatitis C virus)
 PN JP 2002512791-A/584
 PD 08-MAY-2002
 PF 26-APR-1999 JP 2000545991
 PR 27-APR-1998 US 60/083217,18-SEP-1998 US 60/100842 PR
 25-FEB-1999 US 09/257608,23-MAR-1999 US 09/274553 PI
 LAWRENCE BLATT,JAMES A MCSWIGGEN,ELISABETH ROBERTS,PAMELA A PI
 PAVCO,
 PI DENNIS MACEJAK

PC C12N9/00,A61K31/7105,A61K38/21,A61K48/00,A61P31/12,C12N15/09,
 PC A61K37/66,
 PC C12N15/00
 CC Enzymatic nucleic acid treatment of diseases or conditions related to hepatitis C virus infection.
 CC hepatitis C virus infection.
 FH Key Location/Qualifiers
 FT source 1..15
 FT virus)

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 15;
 Best Local Similarity 66.7%; Pred. No. 9.6e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANGGKTGC 10
 : |||:|

Db 1 GAACGGTGC 9

RESULT 72
 BD207298
 LOCUS 15 bp RNA linear PAT 17-JUL-2003
 DEFINITION Enzymatic nucleic acid treatment of diseases or conditions related to hepatitis C virus infection.

ACCESSION BD207298
 VERSION BD207298.1 GI:33017069
 KEYWORDS JP 2002512791-A/889.
 SOURCE unidentified
 ORGANISM unclassified.

REFERENCE 1 (bases 1 to 15)
 AUTHORS Blatt,L., McSwiggen,J.A., Roberts,E., Pavco,P.A. and Macejak,D.
 TITLE Enzymatic nucleic acid treatment of diseases or conditions related to hepatitis C virus infection
 JOURNAL Patent: JP 2002512791-A 889 08-MAY-2002;
 COMMENT OS Hepatitis virus (hepatitis C virus)
 PN JP 2002512791-A/889
 PD 08-MAY-2002
 PF 26-APR-1999 JP 2000545991
 PR 27-APR-1998 US 60/083217,18-SEP-1998 US 60/100842 PR
 25-FEB-1999 US 09/257608,23-MAR-1999 US 09/274553 PI
 LAWRENCE BLATT,JAMES A MCSWIGGEN,ELISABETH ROBERTS,PAMELA A PI
 PAVCO,
 PI DENNIS MACEJAK

BD207298
 BD207298.1 GI:33017068
 JP 2002512791-A/888.
 SOURCE unidentified
 ORGANISM unclassified.

REFERENCE 1 (bases 1 to 15)
 AUTHORS Blatt,L., McSwiggen,J.A., Roberts,E., Pavco,P.A. and Macejak,D.
 TITLE Enzymatic nucleic acid treatment of diseases or conditions related to hepatitis C virus infection
 JOURNAL Patent: JP 2002512791-A 888 08-MAY-2002;
 COMMENT OS Hepatitis virus (hepatitis C virus)
 PN JP 2002512791-A/888
 PD 08-MAY-2002
 PF 26-APR-1999 JP 2000545991
 PR 27-APR-1998 US 60/083217,18-SEP-1998 US 60/100842 PR
 25-FEB-1999 US 09/257608,23-MAR-1999 US 09/274553 PI
 LAWRENCE BLATT,JAMES A MCSWIGGEN,ELISABETH ROBERTS,PAMELA A PI
 PAVCO,
 PI DENNIS MACEJAK
 PC C12N9/00,A61K31/7105,A61K38/21,A61K48/00,A61P31/12,C12N15/09,
 PC A61K37/66,
 PC C12N15/00
 CC Enzymatic nucleic acid treatment of diseases or conditions related to hepatitis C virus infection.
 CC hepatitis C virus infection.
 FH Key Location/Qualifiers
 FT source 1..15
 FT virus)

FEATURES
 source Location/Qualifiers
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 /organism="unidentified"
 /mol_type="genomic RNA"
 /db_xref="taxon:32644"

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 15;
 Best Local Similarity 66.7%; Pred. No. 9.6e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANGGKTGC 10
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Db 2 TAGCGTGC 10

RESULT 73
 BD207299
 LOCUS 15 bp RNA linear PAT 17-JUL-2003
 DEFINITION Enzymatic nucleic acid treatment of diseases or conditions related to hepatitis C virus infection.

ACCESSION BD207299
 VERSION BD207299.1 GI:33017069
 KEYWORDS JP 2002512791-A/889.
 SOURCE unidentified
 ORGANISM unclassified.

REFERENCE 1 (bases 1 to 15)
 AUTHORS Blatt,L., McSwiggen,J.A., Roberts,E., Pavco,P.A. and Macejak,D.
 TITLE Enzymatic nucleic acid treatment of diseases or conditions related to hepatitis C virus infection
 JOURNAL Patent: JP 2002512791-A 889 08-MAY-2002;
 COMMENT OS Hepatitis virus (hepatitis C virus)
 PN JP 2002512791-A/889
 PD 08-MAY-2002
 PF 26-APR-1999 JP 2000545991
 PR 27-APR-1998 US 60/083217,18-SEP-1998 US 60/100842 PR
 25-FEB-1999 US 09/257608,23-MAR-1999 US 09/274553 PI
 LAWRENCE BLATT,JAMES A MCSWIGGEN,ELISABETH ROBERTS,PAMELA A PI
 PAVCO,
 PI DENNIS MACEJAK

REFERENCE 1 (bases 1 to 15)
AUTHORS Draper,K.G.
TITLE Enzymatic RNA molecule targeted against Hepatitis C virus
JOURNAL Patent: US 5610054-A 332 11-MAR-1997;
FEATURES Location/Qualifiers
source 1..15
/organism="unknown"
/mol_type="unassigned DNA"

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 15;
Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
: |||: |||
Db 1 TAGCGTTCG 9
: |||: |||

RESULT 78
AR234358
LOCUS AR234358 15 bp DNA linear PAT 20-DEC-2002
DEFINITION Sequence 12 from patent US 6458567.
ACCESSION AR234358
VERSION AR234358.1 GI:27277046
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
Unclassified.

REFERENCE 1 (bases 1 to 15)
AUTHORS Barber,J.R., Welch,P.J., Tritz,R., Yei,S. and Yu,M.
TITLE Hepatitis C Virus ribozymes
JOURNAL Patent: US 6458567-A 12 01-OCT-2002;
FEATURES Location/Qualifiers
source 1..15
/organism="unknown"
/mol_type="genomic DNA"

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 15;
Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
: |||: |||
Db 1 GACCGTTCG 9
: |||: |||

RESULT 79
AR234473/c
LOCUS AR234473 15 bp DNA linear PAT 20-DEC-2002
DEFINITION Sequence 6 from patent US 6458584.
ACCESSION AR234473
VERSION AR234473.1 GI:27277177
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
Unclassified.

REFERENCE 1 (bases 1 to 15)
AUTHORS Mirzabekov,A., Guschin,D.Y., Chik,V., Drobyshev,A., Fotin,A.,
Yershov,G. and Lysov,Y.
TITLE Customized oligonucleotide microchips that convert multiple genetic
information to simple patterns, are portable and reusable
JOURNAL Patent: US 6458584-A 6 01-OCT-2002;
FEATURES Location/Qualifiers
source 1..15
/organism="unknown"
/mol_type="genomic DNA"

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 15;
Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
: |||: |||
Db 11 GACCGTTCG 3
: |||: |||

RESULT 80
AR362715
LOCUS AR362715 15 bp DNA linear PAT 03-SEP-2003
DEFINITION Sequence 49 from patent US 5182195.
ACCESSION AR362715
VERSION AR362715.1 GI:34423095
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
Unclassified.

REFERENCE 1 (bases 1 to 15)
AUTHORS Nakahama,K., Kaisho,Y. and Yoshimura,K.
TITLE Method for increasing gene expression using protease deficient
Yeasts
JOURNAL Patent: US 5182195-A 49 26-JAN-1993;
FEATURES Location/Qualifiers
source 1..15
/organism="unknown"
/mol_type="genomic DNA"

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 15;
Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
: |||: |||
Db 2 GACCGTTCG 10
: |||: |||

RESULT 81
AX004379/c
LOCUS AX004379 15 bp DNA linear PAT 24-AUG-2000
DEFINITION Sequence 1 from Patent WO9918234.
ACCESSION AX004379
VERSION AX004379.1 GI:9927856
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
other sequences; artificial sequences.

REFERENCE 1
AUTHORS Wagner,M. and Manem,J.
TITLE Means for qualitative and quantitative analysis of microbial
populations potentially present in a sample
JOURNAL Patent: WO 9918234-A 1 15-APR-1999;
FEATURES WAGNER MICHAEL (DE); SUEZ LYONNAISE DES EAUX (FR)
Location/Qualifiers
source 1..15
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 15;
Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
: |||: |||
Db 11 GACCGTTCG 3
: |||: |||

RESULT 82
AX592418
LOCUS AX592418 15 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 108 from Patent WO02052002.
ACCESSION AX592418

VERSION AX592418.1 GI:27950520
 KEYWORDS synthetic construct
 SOURCE synthetic construct
 ORGANISM other sequences; artificial sequences.
 REFERENCE 1
 AUTHORS Fearon,K.L. and Dina,D.
 TITLE Immunomodulatory polynucleotides and methods of using the same
 JOURNAL Patent: WO 02052002-A 108 04-JUL-2002;
 Dynavax Technologies Corporation (US)
 FEATURES Location/Qualifiers
 source 1..15
 /organism="synthetic construct"
 /mol_type="unassigned DNA"
 /db_xref="taxon:32630"
 /note="Polynucleotide containing CG"
 ORIGIN
 Query Match 68.0%; Score 6.8; DB 6; Length 15;
 Best Local Similarity 66.7%; Pred. No. 9.6e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 Qy 2 DANCCKTCG 10
 Db 7 GAACGTTTCG 15
 RESULT 83
 AX663401/c
 LOCUS AX663401 15 bp DNA linear PAT 22-MAR-2003
 DEFINITION Sequence 27 from Patent WO02097126.
 ACCESSION AX663401
 VERSION AX663401.1 GI:29163741
 KEYWORDS synthetic construct
 SOURCE other sequences; artificial sequences.
 ORGANISM
 REFERENCE 1
 AUTHORS Weizenegger,M.
 TITLE Method for detecting gram-positive bacteria
 JOURNAL Patent: WO 02097126-A 27 05-DEC-2002;
 Hain Lifescience GmbH (DE)
 FEATURES Location/Qualifiers
 source 1..15
 /organism="synthetic construct"
 /mol_type="unassigned DNA"
 /db_xref="taxon:32630"
 /note="Sonde"
 ORIGIN
 Query Match 68.0%; Score 6.8; DB 6; Length 15;
 Best Local Similarity 66.7%; Pred. No. 9.6e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 Qy 2 DANCCKTCG 10
 Db 12 GAACGTTTCG 4
 RESULT 84
 BD076708/c
 LOCUS BD076708 15 bp DNA linear PAT 27-AUG-2002
 DEFINITION Method of qualitatively and quantitatively assaying micropopulation
 likely contained in sample.
 ACCESSION BD076708
 VERSION BD076708.1 GI:22622311
 KEYWORDS JP 2001519168-A/1.
 SOURCE synthetic construct
 ORGANISM other sequences; artificial sequences.
 REFERENCE 1 (bases 1 to 15)
 AUTHORS Geeyow,E., Urbain,V., Mannern,M., Littmann,B.E., Stall,D.A.,
 Flaccus,J. and Wagner,M.

TITLE Method of qualitatively and quantitatively assaying micropopulation
 JOURNAL likely contained in sample
 Patent: JP 2001519168-A 1 23-OCT-2001;
 SUEZ LYONNAISE DES EAUX,NORTHWESTERN UNIVERSITY
 COMMENT OS Artificial Sequence
 PN JP 2001519168-A/1
 PD 23-OCT-2001
 PF 02-OCT-1998 JP 2000515026
 PR 08-OCT-1997 FR 97/12552
 PI EMMANUEL GEYOW,VINCERT URBAIN,JACK MANNERM,BRUCE E LITTMANN,
 DAVID A STALL,JODY FLACCUS,MICHAEL WAGNER
 PC 12N15/09.C1201/68.C12N15/00
 CC Description of artificial Sequence : primer_bind FH Key
 Location/Qualifiers
 FT source 1..15
 /organism='Artificial Sequence'.
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 source 1..15
 /organism="synthetic construct"
 /mol_type="genomic DNA"
 /db_xref="taxon:32630"
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 Best Local Similarity 66.7%; Pred. No. 9.6e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 Qy 2 DANCCKTCG 10
 Db 11 GACCGGTCG 3
 RESULT 85
 AR176673
 LOCUS AR176673 16 bp DNA linear PAT 17-DEC-2001
 DEFINITION Sequence 4 from patent US 6312894.
 ACCESSION AR176673
 VERSION AR176673.1 GI:17919028
 KEYWORDS Unknown.
 SOURCE Unknown.
 ORGANISM Unclassified.
 REFERENCE 1 (bases 1 to 16)
 AUTHORS Hedgpeth,J., Afonina,I.A., Kutyavin,I.V., Lukhtanov,E.A.,
 Belousov,E.S. and Meyer,R.B. Jr.
 TITLE Hybridization and mismatch discrimination using oligonucleotides
 conjugated to minor groove binders
 JOURNAL Patent: US 6312894-A 4 06-NOV-2001;
 FEATURES Location/Qualifiers
 source 1..16
 /organism="unknown"
 /mol_type="unassigned DNA"
 ORIGIN
 Query Match 68.0%; Score 6.8; DB 6; Length 16;
 Best Local Similarity 66.7%; Pred. No. 9.6e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 Qy 2 DANCCKTCG 10
 Db 4 TAACGTTTCG 12
 RESULT 86
 BD260024
 LOCUS BD260024 16 bp DNA linear PAT 17-JUL-2003
 DEFINITION Hybridization and mismatch discrimination using oligonucleotides
 conjugated to minor groove binders.
 ACCESSION BD260024
 VERSION BD260024.1 GI:33069794
 KEYWORDS JP 2002527040-A/4.
 SOURCE Escherichia coli
 ORGANISM Escherichia coli

Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales; Enterobacteriaceae; Escherichia.

REFERENCE 1 (bases 1 to 16)
 AUTHORS Hedgpeth, J., Afonina, I. A., Kutayavin, I. V., Lukhtanov, E. A., Belousov, E. S. and Jr, R. B. M.
 TITLE Hybridization and mismatch discrimination using oligonucleotides conjugated to minor groove binders
 JOURNAL Patent: JP 2002527040-A 4 27-AUG-2002;
 EPOCH BIOSCIENCES INC
 COMMENT OS Escherichia coli
 PN JP 2002527040-A/4
 PD 27-AUG-2002
 PF 05-APR-1999 JP 2000542342
 PR 03-APR-1998 US 09/054832
 PI JOEL HEDGPETH, IRINA A AFONINA, IGOR V KUTYAVIN, EUGENY A PI LUKHTANOV,
 PC EVGENIY S BELOUSOV, RICH B MEYER JR
 PC C12N15/09, C12N15/09, C07H21/02, C07H21/04, C12Q1/68, G01N21/78, PC G01N33/483,
 PC G01N33/53, G01N33/566, C12N15/00, C12N15/00
 CC Hybridization and mismatch discrimination using CC oligonucleotides
 CC conjugated to minor groove binders
 FH Key Location/Qualifiers
 FT source 1..16
 FT Location/Qualifiers
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 /mol_type="genomic DNA"
 /db_xref="taxon:562"

ORIGIN

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 Best Local Similarity 66.7%; Pred. No. 9.6e+05;
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QY 2 DANCCKTCG 10
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 Db 4 TAACGTCG 12

RESULT 87
 CQ808457
 LOCUS 16 bp DNA linear PAT 10-MAY-2004
 DEFINITION Sequence 1907 from Patent WO2004035803.
 CQ808457
 ACCESSION
 VERSION CQ808457.1 GI:47113851
 KEYWORDS
 SOURCE synthetic construct
 ORGANISM other sequences; artificial sequences.

REFERENCE 1
 AUTHORS Foekens, J., Harbeck, N., Koenig, T., Maier, S., Martens, J., Model, F., Nimmrich, I., Rujan, T., Schmitt, A., Schmitt, M., Look, M. P. and Marx, A.
 TITLE Method and nucleic acids for the improved treatment of breast cell proliferative disorders
 JOURNAL Patent: WO 2004035803-A 1907 29-APR-2004;
 Epigenomics AG (DE)
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 /organism="synthetic construct"
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 /db_xref="taxon:32630"
 /note="Detection oligonucleotide for CTS1"

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 16;
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QY 2 DANCCKTCG 10

Db 1 GAGCGTTCG 9
 : |||: |||

RESULT 88
 AR234357
 LOCUS 16 bp DNA linear PAT 20-DEC-2002
 DEFINITION Sequence 11 from patent US 6458567.
 AR234357
 ACCESSION
 VERSION AR234357.1 GI:27277045
 KEYWORDS
 SOURCE Unknown.
 ORGANISM Unknown.
 REFERENCE Unclassified.
 1 (bases 1 to 16)
 AUTHORS Barber, J. R., Welch, P. J., Tritz, R., Yei, S. and Yu, M.
 TITLE Hepatitis C Virus ribozymes
 JOURNAL Patent: US 6458567-A 11 01-OCT-2002;
 FEATURES
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 /organism="unknown"
 /mol_type="genomic DNA"

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 16;
 Best Local Similarity 66.7%; Pred. No. 9.6e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
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 Db 1 GAGCGTTCG 9

RESULT 89
 AR474438
 LOCUS 16 bp DNA linear PAT 20-FEB-2004
 DEFINITION Sequence 37 from patent US 6691568.
 AR474438
 ACCESSION
 VERSION AR474438.1 GI:42713318
 KEYWORDS
 SOURCE Unknown.
 ORGANISM Unknown.
 REFERENCE Unclassified.
 1 (bases 1 to 16)
 AUTHORS Akamatsu, M.
 TITLE Air meter
 JOURNAL Patent: US 6691568-A 37 17-FEB-2004;
 FEATURES
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 /mol_type="genomic DNA"

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 16;
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 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
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 Db 1 TATCGTTCG 9

RESULT 90
 AR475502
 LOCUS 16 bp DNA linear PAT 20-FEB-2004
 DEFINITION Sequence 37 from patent US 6692954.
 AR475502
 ACCESSION
 VERSION AR475502.1 GI:42714985
 KEYWORDS
 SOURCE Unknown.
 ORGANISM Unknown.
 REFERENCE Unclassified.
 1 (bases 1 to 16)

AUTHORS Ghazal, P. and Huang, H.
 TITLE Generation of human cytomegalovirus yeast artificial chromosome recombinants

JOURNAL Patent: US 6692954-A 37 17-FEB-2004;

FEATURES
 source
 1. .16
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 /mol_type="genomic DNA"

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 16;
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 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
 : || ||: |||
 Db 1 TATCGTTCG 9

RESULT 91

AX194461
 LOCUS AX194461 16 bp DNA linear PAT 28-AUG-2001
 DEFINITION Sequence 61 from Patent WO0151500.
 ACCESSION AX194461
 VERSION AX194461.1 GI:15385117
 KEYWORDS
 ORGANISM
 synthetic construct
 other sequences; artificial sequences.

REFERENCE 1
 AUTHORS Klinman, D., Ishii, K. and Verthelyi, D.
 TITLE Oligodeoxynucleotide and its use to induce an immune response
 JOURNAL Patent: WO 0151500-A 61 19-JUL-2001;
 Secretary of the Department of Health and Human Services (US)

FEATURES
 source
 1. .16
 /organism="synthetic construct"
 /mol_type="unassigned DNA"
 /db_xref="taxon:32630"
 /note="Synthetic DNA"

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 16;
 Best Local Similarity 66.7%; Pred. No. 9.6e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
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 Db 5 GAACGTTTCG 13

RESULT 92

AX465411
 LOCUS AX465411 16 bp DNA linear PAT 16-JUL-2002
 DEFINITION Sequence 79 from Patent WO0211761.
 ACCESSION AX465411
 VERSION AX465411.1 GI:21899774
 KEYWORDS
 SOURCE
 synthetic construct
 other sequences; artificial sequences.

REFERENCE 1
 AUTHORS Mond, J.J., Prince, G. and Kliman, D.M.
 TITLE Vaccine against RSV
 JOURNAL Patent: WO 0211761-A 79 14-FEB-2002;
 HENRY M. JACKSON FOUNDATION FOR THE ADVANCEMENT OF MILITARY MEDICINE (US)

FEATURES
 source
 Location/Qualifiers
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 /mol_type="unassigned DNA"
 /db_xref="taxon:32630"
 /note="Synthetic oligonucleotide"

ORIGIN

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Qy 2 DANCCKTCG 10
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 Db 5 GAACGTTTCG 13

RESULT 93

AX592321
 LOCUS AX592321 16 bp DNA linear PAT 27-JAN-2003
 DEFINITION Sequence 11 from Patent WO02052002.
 ACCESSION AX592321
 VERSION AX592321.1 GI:27950423
 KEYWORDS
 SOURCE
 synthetic construct
 other sequences; artificial sequences.

REFERENCE 1
 AUTHORS Fearon, K.L. and Dina, D.
 TITLE Immunomodulatory polynucleotides and methods of using the same
 JOURNAL Patent: WO 02052002-A 11 04-JUL-2002;
 Dynavax Technologies Corporation (US)

FEATURES
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 1. .16
 /organism="synthetic construct"
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 /db_xref="taxon:32630"
 /note="Polynucleotide containing CG"

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 16;
 Best Local Similarity 66.7%; Pred. No. 9.6e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
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 Db 6 GAACGTTTCG 14

RESULT 94

AX592321/c
 LOCUS AX592321 16 bp DNA linear PAT 27-JAN-2003
 DEFINITION Sequence 11 from Patent WO02052002.
 ACCESSION AX592321
 VERSION AX592321.1 GI:27950423
 KEYWORDS
 SOURCE
 synthetic construct
 other sequences; artificial sequences.

REFERENCE 1
 AUTHORS Fearon, K.L. and Dina, D.
 TITLE Immunomodulatory polynucleotides and methods of using the same
 JOURNAL Patent: WO 02052002-A 11 04-JUL-2002;
 Dynavax Technologies Corporation (US)

FEATURES
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ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 16;
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 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
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 Db 13 GAACGTTTCG 5

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RESULT 95
AX592423
LOCUS       AX592423
DEFINITION Sequence 113 from Patent WO02052002.
ACCESSION  AX592423
VERSION    AX592423.1 GI:27950525
KEYWORDS   .
SOURCE     synthetic construct
ORGANISM   other sequences; artificial sequences.
REFERENCE  1
AUTHORS    Fearon,K.L. and Dina,D.
TITLE      Immunomodulatory polynucleotides and methods of using the same
JOURNAL    Patent: WO 02052002-A 113 04-JUL-2002;
            Dynavax Technologies Corporation (US)
FEATURES   Location/Qualifiers
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Qy      2 DANCCKTCG 10
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Db      8 GAACGTTTCG 16

RESULT 96
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LOCUS       AX592427
DEFINITION Sequence 117 from Patent WO02052002.
ACCESSION  AX592427
VERSION    AX592427.1 GI:27950529
KEYWORDS   .
SOURCE     synthetic construct
ORGANISM   other sequences; artificial sequences.
REFERENCE  1
AUTHORS    Fearon,K.L. and Dina,D.
TITLE      Immunomodulatory polynucleotides and methods of using the same
JOURNAL    Patent: WO 02052002-A 117 04-JUL-2002;
            Dynavax Technologies Corporation (US)
FEATURES   Location/Qualifiers
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Qy      2 DANCCKTCG 10
       :| ||:|
Db      8 GAACGTTTCG 16

RESULT 97
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LOCUS       AX592427
DEFINITION Sequence 117 from Patent WO02052002.
ACCESSION  AX592427
VERSION    AX592427.1 GI:27950529
KEYWORDS   .
SOURCE     synthetic construct
ORGANISM   other sequences; artificial sequences.
REFERENCE  1
AUTHORS    Fearon,K.L. and Dina,D.
TITLE      Immunomodulatory polynucleotides and methods of using the same
JOURNAL    Patent: WO 02052002-A 117 04-JUL-2002;
            Dynavax Technologies Corporation (US)
FEATURES   Location/Qualifiers
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Db      8 GAACGTTTCG 16

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AX686160
LOCUS       AX686160
DEFINITION Sequence 37 from Patent WO02057437.
ACCESSION  AX686160
VERSION    AX686160.1 GI:29371994
KEYWORDS   .
SOURCE     Human herpesvirus 5
ORGANISM   Human herpesvirus 5
            Viruses; dsDNA viruses, no RNA stage; Herpesviridae;
            Betaherpesvirinae; Cytomegalovirus.
REFERENCE  1
AUTHORS    Ghazal,P. and Huang,H.
TITLE      Generation of human cytomegalovirus yeast artificial chromosome
            recombinants
JOURNAL    Patent: WO 02057437-A 37 25-JUL-2002;
            The Scripps Research Institute (US)
FEATURES   Location/Qualifiers
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              /db_xref="taxon:10359"
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Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy      2 DANCCKTCG 10
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Db      1 TATCGTTTCG 9

RESULT 98
AR040387
LOCUS       AR040387
DEFINITION Sequence 1235 from patent US 5807743.
ACCESSION  AR040387
VERSION    AR040387.1 GI:5959750
KEYWORDS   .
SOURCE     Unknown.
ORGANISM   Unknown.
REFERENCE  1 (bases 1 to 17)
AUTHORS    Stinchcomb,D.T. and McSwiggen,J.A.
TITLE      Interleukin-2 receptor gamma-chain ribozymes
JOURNAL    Patent: US 5807743-A 1235 15-SEP-1998;
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Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy      2 DANCCKTCG 10
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Db      2 GAACGTCG 10

RESULT 99
CQ774568/c
LOCUS       CQ774568/c
DEFINITION Sequence 7 from Patent WO2004013168.
ACCESSION  CQ774568
VERSION    CQ774568.1 GI:45237789
KEYWORDS   .
SOURCE     synthetic construct
ORGANISM   synthetic construct
            other sequences; artificial sequences.
REFERENCE  1
AUTHORS    Selvaraj,G., Wang,A., Xia,Q., Xie,W. and Datla,R.

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TITLE Raftin gene, product, and use thereof
JOURNAL Patent: WO 2004013168-A 7 12-FEB-2004;
NATIONAL RESEARCH COUNCIL OF CANADA (CA)
FEATURES Location/Qualifiers
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Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANGKTCG 10
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Db 12 AAGCGTTCG 4

RESULT 100
CQ774576
LOCUS 17 bp DNA linear PAT 06-MAR-2004
DEFINITION Sequence 15 from Patent WO2004013168.
ACCESSION CQ774576
VERSION CQ774576.1 GI:45237797
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
other sequences; artificial sequences.

REFERENCE 1
AUTHORS Selvaraj,G., Wang,A., Xia,Q., Xie,W. and Datla,R.
TITLE Raftin gene, product, and use thereof
JOURNAL Patent: WO 2004013168-A 15 12-FEB-2004;
NATIONAL RESEARCH COUNCIL OF CANADA (CA)
FEATURES Location/Qualifiers
source
1. .17
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/db_xref="taxon:32630"
/note="Primer 3080"

ORIGIN
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Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANGKTCG 10
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Db 6 AAGCGTTCG 14

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Job time : 860.5 secs

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GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

Run on: June 29, 2005, 16:33:43 ; Search time 219.5 Seconds
(without alignments)
269.692 Million cell updates/sec

Title: US-10-033-243-62

Perfect score: 10

Sequence: 1 ndancgkctg 10

Scoring table: IDENTITY NUC

Gapop 10.0, Gapext 1.0

Searched: 4390206 seqs, 2959870667 residues

Total number of hits satisfying chosen parameters: 8780412

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 100 summaries

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1: Geneseqn1980s:*

2: Geneseqn1990s:*

3: Geneseqn2000s:*

4: Geneseqn2001as:*

5: Geneseqn2001bs:*

6: Geneseqn2002as:*

7: Geneseqn2002bs:*

8: Geneseqn2003as:*

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11: Geneseqn2003ds:*

12: Geneseqn2004as:*

13: Geneseqn2004bs:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

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| 3 | 6.8 | 68.0 | 10 | 6 ABQ75136 | Abq75136 ISS immun |
| C 4 | 6.8 | 68.0 | 10 | 6 ABQ75136 | Abq75136 ISS immun |
| 5 | 6.8 | 68.0 | 10 | 6 ABQ75141 | Abq75141 ISS immun |
| 6 | 6.8 | 68.0 | 10 | 6 ABQ75135 | Abq75135 ISS immun |
| 7 | 6.8 | 68.0 | 10 | 6 ABQ75144 | Abq75144 ISS immun |
| 8 | 6.8 | 68.0 | 10 | 6 ABQ75150 | Abq75150 ISS immun |
| 9 | 6.8 | 68.0 | 10 | 6 ABQ75148 | Abq75148 ISS immun |
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| 11 | 6.8 | 68.0 | 10 | 6 ABQ75134 | Abq75134 ISS immun |
| 12 | 6.8 | 68.0 | 10 | 6 ABQ75143 | Abq75143 ISS immun |
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| 14 | 6.8 | 68.0 | 10 | 6 ABQ75142 | Abq75142 ISS immun |
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| 16 | 6.8 | 68.0 | 10 | 6 ABQ75140 | Abq75140 ISS immun |
| 17 | 6.8 | 68.0 | 10 | 6 ABQ75131 | Abq75131 ISS immun |
| 18 | 6.8 | 68.0 | 10 | 6 ABQ75139 | Abq75139 ISS immun |
| 19 | 6.8 | 68.0 | 10 | 6 ABQ75145 | Abq75145 ISS immun |
| 20 | 6.8 | 68.0 | 10 | 6 ABQ75146 | Abq75146 ISS immun |

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| 21 | 6.8 | 68.0 | 10 | 6 ABQ75151 | Abq75151 ISS immun |
| 22 | 6.8 | 68.0 | 10 | 6 ABQ75147 | Abq75147 ISS immun |
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| 25 | 6.8 | 68.0 | 10 | 9 ADB88818 | Adb88818 Chimeric |
| 26 | 6.8 | 68.0 | 10 | 9 ADB88815 | Adb88815 Chimeric |
| C 27 | 6.8 | 68.0 | 10 | 9 ADB88815 | Adb88815 Chimeric |
| 28 | 6.8 | 68.0 | 10 | 9 ADB88816 | Adb88816 Chimeric |
| 29 | 6.8 | 68.0 | 10 | 9 ADB88807 | Adb88807 Chimeric |
| 30 | 6.8 | 68.0 | 10 | 9 ADB88805 | Adb88805 Chimeric |
| 31 | 6.8 | 68.0 | 10 | 9 ADB88813 | Adb88813 Chimeric |
| 32 | 6.8 | 68.0 | 10 | 9 ADB88811 | Adb88811 Chimeric |
| 33 | 6.8 | 68.0 | 10 | 9 ADB88802 | Adb88802 Chimeric |
| 34 | 6.8 | 68.0 | 10 | 9 ADB88819 | Adb88819 Chimeric |
| 35 | 6.8 | 68.0 | 10 | 9 ADB88806 | Adb88806 Chimeric |
| 36 | 6.8 | 68.0 | 10 | 9 ADB88814 | Adb88814 Chimeric |
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| 39 | 6.8 | 68.0 | 10 | 9 ADB88808 | Adb88808 Chimeric |
| 40 | 6.8 | 68.0 | 10 | 9 ADB88810 | Adb88810 Chimeric |
| 41 | 6.8 | 68.0 | 10 | 9 ADB88809 | Adb88809 Chimeric |
| 42 | 6.8 | 68.0 | 10 | 9 ADB88812 | Adb88812 Chimeric |
| 43 | 6.8 | 68.0 | 10 | 9 ADB88817 | Adb88817 Chimeric |
| 44 | 6.8 | 68.0 | 10 | 12 ADK67593 | Adk67593 Immunosti |
| 45 | 6.8 | 68.0 | 10 | 12 ADK67582 | Adk67582 Immunosti |
| 46 | 6.8 | 68.0 | 10 | 12 ADK67580 | Adk67580 Immunosti |
| C 47 | 6.8 | 68.0 | 10 | 12 ADK67580 | Adk67580 Immunosti |
| 48 | 6.8 | 68.0 | 10 | 12 ADK67584 | Adk67584 Immunosti |
| C 49 | 6.8 | 68.0 | 10 | 12 ADK67584 | Adk67584 Immunosti |
| 50 | 6.8 | 68.0 | 10 | 12 ADK67579 | Adk67579 Immunosti |
| 51 | 6.8 | 68.0 | 10 | 12 ADK67592 | Adk67592 Immunosti |
| 52 | 6.8 | 68.0 | 10 | 12 ADK67595 | Adk67595 Immunosti |
| C 53 | 6.8 | 68.0 | 10 | 12 ADK67590 | Adk67590 Immunosti |
| 54 | 6.8 | 68.0 | 10 | 12 ADK67583 | Adk67583 Immunosti |
| 55 | 6.8 | 68.0 | 10 | 12 ADQ95321 | Adq95321 Branched |
| C 56 | 6.8 | 68.0 | 10 | 12 ADQ95321 | Adq95321 Branched |
| 57 | 6.8 | 68.0 | 10 | 12 ADQ95322 | Adq95322 Branched |
| C 58 | 6.8 | 68.0 | 10 | 12 ADQ95322 | Adq95322 Branched |
| 59 | 6.8 | 68.0 | 10 | 12 ADQ95323 | Adq95323 Branched |
| C 60 | 6.8 | 68.0 | 10 | 12 ADQ95323 | Adq95323 Branched |
| 61 | 6.8 | 68.0 | 10 | 12 ADQ95265 | Adq95265 Branched |
| 62 | 6.8 | 68.0 | 10 | 12 ADQ95271 | Adq95271 Branched |
| 63 | 6.8 | 68.0 | 10 | 12 ADQ95318 | Adq95318 Branched |
| 64 | 6.8 | 68.0 | 10 | 12 ADQ95320 | Adq95320 Branched |
| C 65 | 6.8 | 68.0 | 10 | 12 ADQ95320 | Adq95320 Branched |
| 66 | 6.8 | 68.0 | 10 | 12 ADQ95273 | Adq95273 Branched |
| 67 | 6.8 | 68.0 | 10 | 12 ADQ95277 | Adq95277 Branched |
| C 68 | 6.8 | 68.0 | 10 | 12 ADQ95277 | Adq95277 Branched |
| 69 | 6.8 | 68.0 | 10 | 12 ADQ95262 | Adq95262 Branched |
| 70 | 6.8 | 68.0 | 10 | 12 ADQ95278 | Adq95278 Branched |
| 71 | 6.8 | 68.0 | 10 | 12 ADQ95311 | Adq95311 Branched |
| 72 | 6.8 | 68.0 | 10 | 12 ADQ95312 | Adq95312 Branched |
| 73 | 6.8 | 68.0 | 10 | 12 ADQ95317 | Adq95317 Branched |
| 74 | 6.8 | 68.0 | 10 | 12 ADQ95266 | Adq95266 Branched |
| 75 | 6.8 | 68.0 | 10 | 12 ADQ95267 | Adq95267 Branched |
| 76 | 6.8 | 68.0 | 10 | 12 ADQ95319 | Adq95319 Branched |
| 77 | 6.8 | 68.0 | 10 | 12 ADQ95269 | Adq95269 Branched |
| 78 | 6.8 | 68.0 | 10 | 12 ADQ95274 | Adq95274 Branched |
| C 79 | 6.8 | 68.0 | 10 | 12 ADQ95274 | Adq95274 Branched |
| 80 | 6.8 | 68.0 | 10 | 12 ADQ95268 | Adq95268 Branched |
| 81 | 6.8 | 68.0 | 10 | 12 ADQ95275 | Adq95275 Branched |
| C 82 | 6.8 | 68.0 | 10 | 12 ADQ95275 | Adq95275 Branched |
| 83 | 6.8 | 68.0 | 10 | 12 ADQ95315 | Adq95315 Branched |
| 84 | 6.8 | 68.0 | 10 | 12 ADQ95326 | Adq95326 Branched |
| 85 | 6.8 | 68.0 | 10 | 12 ADQ95276 | Adq95276 Branched |
| C 86 | 6.8 | 68.0 | 10 | 12 ADQ95276 | Adq95276 Branched |
| 87 | 6.8 | 68.0 | 10 | 12 ADQ95270 | Adq95270 Branched |
| 88 | 6.8 | 68.0 | 10 | 12 ADQ95272 | Adq95272 Branched |
| 89 | 6.8 | 68.0 | 10 | 12 ADQ95314 | Adq95314 Branched |
| 90 | 6.8 | 68.0 | 10 | 12 ADQ95333 | Adq95333 Branched |
| 91 | 6.8 | 68.0 | 10 | 12 ADQ95264 | Adq95264 Branched |
| 92 | 6.8 | 68.0 | 10 | 12 ADQ95313 | Adq95313 Branched |
| 93 | 6.8 | 68.0 | 10 | 12 ADQ95325 | Adq95325 Branched |

94 6.8 68.0 10 12 ADQ95263 Adg95263 Branched
95 6.8 68.0 10 12 ADQ95279 Adg95279 Branched
96 6.8 68.0 10 12 ADQ95280 Adg95280 Branched
97 6.8 68.0 10 12 ADQ95316 Adg95316 Branched
98 6.8 68.0 10 12 ADQ95324 Adg95324 Branched
99 6.8 68.0 11 6 ABQ75244 Abq75244 ISS immun
100 6.8 68.0 11 6 ABQ75229 Abq75229 ISS immun

ALIGNMENTS

RESULT 1
AAF34378/C
ID AAF34378 standard; DNA; 10 BP.
XX AAF34378;
AC
DT 23-MAR-2001 (first entry)
XX
DE Yeast NORF gene SAGE tag oligonucleotide SEQ ID NO:1117.
XX
KW Yeast; Saccharomyces cerevisiae; characterisation; cell cycle; NORF;
KW nor previously assigned open reading frame; nonannotated ORF; SAGE;
KW serial analysis of gene expression; antifungal; tag; identification;
KW linker; PCR primer; ds.
XX
OS Saccharomyces cerevisiae.
XX
PN WO200077214-A2.
XX
PD 21-DEC-2000.
XX
PF 14-JUN-2000; 2000WO-US016223.
XX
PR 16-JUN-1999; 99US-00335032.
XX
PA (UYJO) UNIV JOHNS HOPKINS.
XX
PI Velculescu V, Vogelstein B, Kinzler K;
XX WPI; 2001-061874/07.
XX
PT Yeast gene coding sequences comprising NORF genes with serial analysis of
PT gene expression (SAGE) tags, useful for studying, monitoring and
PT affecting phases of the cell cycle.
XX
PS Example; Page 39; 419pp; English.
XX
CC The present invention describes an isolated DNA molecule comprising a
CC coding sequence of a yeast gene selected from a group of 745 NORF (not
CC previously assigned open reading frame; or nonannotated ORF) genes
CC comprising a SAGE (serial analysis of gene expression) tag. Also
CC described are: (1) a method (M1) of using NORF genes to affect the cell
CC cycle comprising administering a NORF gene whose expression varies by at
CC least 10% between any two phases of the cell cycle selected from log
CC phase, S phase and G2/M; (2) a method (M2) for screening candidate
CC antifungal drugs comprising: (a) contacting a test substance with a yeast
CC cell; and (b) monitoring expression of a NORF gene whose expression
CC varies as in M1, where a test substance which modifies the expression of
CC the yeast gene is a candidate antifungal drug; (3) a method (M3) for
CC identifying human genes which are involved in cell cycle progression
CC comprising contacting human DNA with a probe which comprises at least 10
CC contiguous nucleotides of a NORF gene whose expression varies as in M1;
CC and (4) a method (M4) for identifying a candidate drug as a member of a
CC class of drugs having a characteristic effect on gene expression in a
CC yeast cell comprising contacting a yeast cell with a candidate drug and
CC monitoring expression in the yeast cell of at least 1 NORF gene whose
CC expression is affected by the class of drugs. The NORF genes may be used
CC to study, monitor and affect phases of the cell cycle, the differentially
CC expressed genes may be used as markers of phases of the cell cycle. The
CC methods may be used to identify candidate drugs which affect the cell
CC cycle and for identification of antifungal drugs. AAF33268 to AAF44064

CC represent SAGE tags used in the exemplification of the present invention.
CC AAF33262 to AAF33267 represent linkers and PCR primers used in the SAGE
CC method, in the exemplification of the present invention
XX
SQ Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;
Query Match 68.0%; Score 6.8; DB 5; Length 10; ✓
Best Local Similarity 66.7%; Pred. No. 2e+05; 1; Indels 0; Gaps 0;
Matches 6; Conservative 2; Mismatches 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
Db 10 AACCGTTGC 2
GGCTTGCC AA
CCGACGGT
RESULT 2 117
ABQ75130
ID ABQ75130 standard; DNA; 10 BP.
XX
AC ABQ75130;
XX
DT 05-NOV-2002 (first entry)
XX
DE ISS immunomodulatory oligonucleotide SEQ ID NO:63.
XX
KW Immunostimulatory sequence; ISS: immunomodulatory; immune response;
KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
KW immunoglobulin E; IGE-related disorder; antiallergic; antiasthmatic;
KW virucide; antibacterial; protozoacide; ss.
XX
OS Synthetic.
XX
PN WO200252002-A2.
XX
PD 04-JUL-2002.
XX
PF 27-DEC-2001; 2001WO-US050821.
XX
PR 27-DEC-2000; 2000US-0258675P.
XX
PA (DYNA-) DYNAX TECHNOLOGIES CORP.
XX
PI Fearon KL, Dina D;
XX
DR WPI; 2002-657426/70.
XX
PT Immunomodulatory polynucleotide for modulating an immune response in a
PT subject suffering from disorders associated with Th2-type immune
PT response, e.g. allergy, or infectious disease, comprises an
PT immunostimulatory sequence.
XX
PS Disclosure; Page 5; 95pp; English.
XX
CC The present invention describes an immunomodulatory polynucleotide (I)
CC comprising an immunostimulatory sequence (ISS). Also described: (1) an
CC immunomodulatory composition comprising (1); (2) an immunomodulatory
CC polynucleotide/microcarrier (IMP/MC) complex, comprising (1) linked to a
CC biodegradable MC, where the MC is less than 10 micrometre in size; and
CC (3) a kit comprising (1). (1) has antiallergic, antiasthmatic, virucide,
CC antibacterial and protozoacide activities, and can be used as a modulator
CC of immune response. (1) is useful for modulating an immune response in an
CC individual suffering from disorders associated with a Th2-type immune
CC response, especially an allergy or asthma, or an infectious disease. (1)
CC is also useful for increasing interferon-gamma (IFN-gamma) in an
CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
CC individual having a viral infection. (1) is further useful for
CC ameliorating a symptom of an infectious disease caused by a cellular
CC pathogen such as mycobacterial disease, malaria, leishmaniasis,
CC toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a
CC symptom of an immunoglobulin E (IGE)-related disorder, preferably an
CC allergy-related disorder, in particular asthma in an individual. The

CC present sequence represents an immunomodulatory oligonucleotide which is
 CC specifically not claimed in the present invention
 XX
 SQ Sequence 10 BP; 2 A; 2 C; 3 G; 3 T; 0 U; 0 Other;
 Query Match 68.0%; Score 6.8; DB 6; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANCGRCTCG 10
 :|||:
 Db 2 GAACGTTTCG 10
 :|||:
 RESULT 3
 ABQ75136
 ID ABQ75136 standard; DNA; 10 BP. ✓
 XX
 AC ABQ75136;
 XX
 DT 05-NOV-2002 (first entry)
 XX
 DE ISS immunomodulatory oligonucleotide SEQ ID NO:77.
 XX
 KW Immunostimulatory sequence; ISS: immunomodulatory; immune response;
 KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
 KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
 KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
 KW immunoglobulin E; IgE-related disorder; anti-allergic; antiasthmatic;
 KW virucide; antibacterial; protozoacide; ss.
 XX
 OS Synthetic.
 XX
 PN WO200252002-A2.
 XX
 PD 04-JUL-2002.
 XX
 PF 27-DEC-2001; 2001WO-US050821.
 XX
 PR 27-DEC-2000; 2000US-0258675P.
 XX
 PA (DYNA-) DYNAX TECHNOLOGIES CORP.
 XX
 PI Fearon KL, Dina D;
 XX
 WPI; 2002-657426/70.
 XX
 PT Immunomodulatory polynucleotide for modulating an immune response in a
 PT subject suffering from disorders associated with Th2-type immune
 PT response, e.g. allergy, or infectious disease, comprises an
 PT immunostimulatory sequence.
 XX
 PS Claim 3; Page 88; 95pp; English.
 XX
 CC The present invention describes an immunomodulatory polynucleotide (I)
 CC comprising an immunostimulatory sequence (ISS). Also described: (1) an
 CC immunomodulatory composition comprising (1); (2) an immunomodulatory
 CC polynucleotide/microcarrier (IMP/MC) complex, comprising (1) linked to a
 CC biodegradable MC, where the MC is less than 10 micrometre in size; and
 CC (3) a kit comprising (1). (1) has anti-allergic, antiasthmatic, virucide,
 CC antibacterial and protozoacide activities, and can be used as a modulator
 CC of immune response. (1) is useful for modulating an immune response in an
 CC individual suffering from disorders associated with a Th2-type immune
 CC response, especially an allergy or asthma, or an infectious disease. (1)
 CC is also useful for increasing interferon-gamma (IFN-gamma) in an
 CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
 CC individual having a viral infection. (1) is further useful for
 CC ameliorating a symptom of an infectious disease caused by a cellular
 CC pathogen such as mycobacterial disease, malaria, leishmaniasis,
 CC toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a
 CC symptom of an immunoglobulin E (IgE)-related disorder, preferably an
 CC allergy-related disorder, in particular asthma in an individual. The
 CC present sequence represents an immunomodulatory oligonucleotide which is

CC specifically claimed in the present invention
 XX
 SQ Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;
 Query Match 68.0%; Score 6.8; DB 6; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANCGRCTCG 10
 :|||:
 Db 2 GAACGTTTCG 10
 :|||:
 RESULT 4
 ABQ75136/c
 ID ABQ75136 standard; DNA; 10 BP.
 XX
 AC ABQ75136;
 XX
 DT 05-NOV-2002 (first entry)
 XX
 DE ISS immunomodulatory oligonucleotide SEQ ID NO:77. ✓
 XX
 KW Immunostimulatory sequence; ISS: immunomodulatory; immune response;
 KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
 KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
 KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
 KW immunoglobulin E; IgE-related disorder; anti-allergic; antiasthmatic;
 KW virucide; antibacterial; protozoacide; ss.
 XX
 OS Synthetic.
 XX
 PN WO200252002-A2.
 XX
 PD 04-JUL-2002.
 XX
 PF 27-DEC-2001; 2001WO-US050821.
 XX
 PR 27-DEC-2000; 2000US-0258675P.
 XX
 PA (DYNA-) DYNAX TECHNOLOGIES CORP.
 XX
 PI Fearon KL, Dina D;
 XX
 WPI; 2002-657426/70.
 XX
 PT Immunomodulatory polynucleotide for modulating an immune response in a
 PT subject suffering from disorders associated with Th2-type immune
 PT response, e.g. allergy, or infectious disease, comprises an
 PT immunostimulatory sequence.
 XX
 PS Claim 3; Page 88; 95pp; English.
 XX
 CC The present invention describes an immunomodulatory polynucleotide (I)
 CC comprising an immunostimulatory sequence (ISS). Also described: (1) an
 CC immunomodulatory composition comprising (1); (2) an immunomodulatory
 CC polynucleotide/microcarrier (IMP/MC) complex, comprising (1) linked to a
 CC biodegradable MC, where the MC is less than 10 micrometre in size; and
 CC (3) a kit comprising (1). (1) has anti-allergic, antiasthmatic, virucide,
 CC antibacterial and protozoacide activities, and can be used as a modulator
 CC of immune response. (1) is useful for modulating an immune response in an
 CC individual suffering from disorders associated with a Th2-type immune
 CC response, especially an allergy or asthma, or an infectious disease. (1)
 CC is also useful for increasing interferon-gamma (IFN-gamma) in an
 CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
 CC individual having a viral infection. (1) is further useful for
 CC ameliorating a symptom of an infectious disease caused by a cellular
 CC pathogen such as mycobacterial disease, malaria, leishmaniasis,
 CC toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a
 CC symptom of an immunoglobulin E (IgE)-related disorder, preferably an
 CC allergy-related disorder, in particular asthma in an individual. The
 CC present sequence represents an immunomodulatory oligonucleotide which is

XX
SQ Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;
Query Match 68.0%; Score 6.8; DB 6; Length 10;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
:|:|:|:|
Db 9 GAACGTCG 1

RESULT 5
ABQ75141
ID ABQ75141 standard; DNA; 10 BP.
XX
AC ABQ75141;
XX
DT 05-NOV-2002 (first entry)
XX
DE ISS immunomodulatory oligonucleotide SEQ ID NO:70.
XX
KW Immunostimulatory sequence; ISS: immunomodulatory; immune response;
KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
KW immunoglobulin E; IgE-related disorder; antiallergic; antiasthmatic;
KW virucide; antibacterial; protozoacide; ss.
XX
OS Synthetic.
XX
PN WO200252002-A2.
XX
PD 04-JUL-2002.
XX
PF 27-DEC-2001; 2001WO-US050821.
XX
PR 27-DEC-2000; 2000US-0258675P.
XX
PA (DYNA-) DYNAXVAX TECHNOLOGIES CORP.
XX
PI Fearon KL, Dina D;
XX
WPI; 2002-657426/70.
XX
PT Immunomodulatory polynucleotide for modulating an immune response in a
PT subject suffering from disorders associated with Th2-type immune
PT response, e.g. allergy, or infectious disease, comprises an
PT immunostimulatory sequence.
XX
PS Claim 2; Page 88; 95pp; English.
XX
CC The present invention describes an immunomodulatory polynucleotide (I)
CC comprising an immunostimulatory sequence (ISS). Also described: (1) an
CC immunomodulatory composition comprising (1); (2) an immunomodulatory
CC polynucleotide/microcarrier (IMP/MC) complex, comprising (1) linked to a
CC biodegradable MC, where the MC is less than 10 micrometre in size; and
CC (3) a kit comprising (1). (I) has antiallergic, antiasthmatic, virucide,
CC antibacterial and protozoacide activities, and can be used as a modulator
CC of immune response. (I) is useful for modulating an immune response in an
CC individual suffering from disorders associated with a Th2-type immune
CC response, especially an allergy or asthma, or an infectious disease. (I)
CC is also useful for increasing interferon-gamma (IFN-gamma) in an
CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
CC individual having a viral infection. (I) is further useful for
CC ameliorating a symptom of an infectious disease caused by a cellular
CC pathogen such as mycobacterial disease, malaria, leishmaniasis,
CC toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a
CC symptom of an immunoglobulin E (IgE)-related disorder, preferably an
CC allergy-related disorder, in particular asthma in an individual. The
CC present sequence represents an immunomodulatory oligonucleotide which is
CC specifically claimed in the present invention
XX

XX
SQ Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;
Query Match 68.0%; Score 6.8; DB 6; Length 10;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
:|:|:|:|
Db 9 GAACGTCG 1

RESULT 6
ABQ75135
ID ABQ75135 standard; DNA; 10 BP.
XX
AC ABQ75135;
XX
DT 05-NOV-2002 (first entry)
XX
DE ISS immunomodulatory oligonucleotide SEQ ID NO:75.
XX
KW Immunostimulatory sequence; ISS: immunomodulatory; immune response;
KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
KW immunoglobulin E; IgE-related disorder; antiallergic; antiasthmatic;
KW virucide; antibacterial; protozoacide; ss.
XX
OS Synthetic.
XX
PN WO200252002-A2.
XX
PD 04-JUL-2002.
XX
PF 27-DEC-2001; 2001WO-US050821.
XX
PR 27-DEC-2000; 2000US-0258675P.
XX
PA (DYNA-) DYNAXVAX TECHNOLOGIES CORP.
XX
PI Fearon KL, Dina D;
XX
WPI; 2002-657426/70.
XX
PT Immunomodulatory polynucleotide for modulating an immune response in a
PT subject suffering from disorders associated with Th2-type immune
PT response, e.g. allergy, or infectious disease, comprises an
PT immunostimulatory sequence.
XX
PS Claim 3; Page 88; 95pp; English.
XX
CC The present invention describes an immunomodulatory polynucleotide (I)
CC comprising an immunostimulatory sequence (ISS). Also described: (1) an
CC immunomodulatory composition comprising (1); (2) an immunomodulatory
CC polynucleotide/microcarrier (IMP/MC) complex, comprising (1) linked to a
CC biodegradable MC, where the MC is less than 10 micrometre in size; and
CC (3) a kit comprising (1). (I) has antiallergic, antiasthmatic, virucide,
CC antibacterial and protozoacide activities, and can be used as a modulator
CC of immune response. (I) is useful for modulating an immune response in an
CC individual suffering from disorders associated with a Th2-type immune
CC response, especially an allergy or asthma, or an infectious disease. (I)
CC is also useful for increasing interferon-gamma (IFN-gamma) in an
CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
CC individual having a viral infection. (I) is further useful for
CC ameliorating a symptom of an infectious disease caused by a cellular
CC pathogen such as mycobacterial disease, malaria, leishmaniasis,
CC toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a
CC symptom of an immunoglobulin E (IgE)-related disorder, preferably an
CC allergy-related disorder, in particular asthma in an individual. The
CC present sequence represents an immunomodulatory oligonucleotide which is
CC specifically claimed in the present invention
XX

Query Match 68.0%; Score 6.8; DB 6; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANGKTCG 10
 :|||:|
 Db 2 AACGTTTCG 10

RESULT 7

ABQ75144

ID ABQ75144 standard; DNA; 10 BP.

XX

AC ABQ75144;

XX

DT 05-NOV-2002 (first entry)

XX

DE ISS immunomodulatory oligonucleotide SEQ ID NO:73.

XX

Immunostimulatory sequence; ISS: immunomodulatory; immune response;
 allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
 idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
 malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
 immunoglobulin E; IgE-related disorder; antiallergic; antiasthmatic;
 virucide; antibacterial; protozoacide; ss.

OS Synthetic.

XX

XX WO200252002-A2.

PN

XX

XX PD 04-JUL-2002.

XX

PF 27-DEC-2001; 2001WO-US050821.

XX

XX PR 27-DEC-2000; 2000US-0258675P.

XX

XX PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX

XX PI Fearon KL, Dina D;

XX

XX DR WPI; 2002-657426/70.

XX

Immunomodulatory polynucleotide for modulating an immune response in a
 subject suffering from disorders associated with Th2-type immune
 response, e.g. allergy, or infectious disease, comprises an
 immunostimulatory sequence.

XX

XX PS Claim 2; Page 88; 95pp; English.

XX

The present invention describes an immunomodulatory polynucleotide (I)
 comprising an immunostimulatory sequence (ISS). Also described: (1) an
 immunomodulatory composition comprising (I); (2) an immunomodulatory
 polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a
 biodegradable MC, where the MC is less than 10 micrometre in size; and
 (3) a kit comprising (I). (I) has antiallergic, antiasthmatic, virucide,
 antibacterial and protozoacide activities, and can be used as a modulator
 of immune response. (I) is useful for modulating an immune response in an
 individual suffering from disorders associated with a Th2-type immune
 response, especially an allergy or asthma, or an infectious disease. (I)
 is also useful for increasing interferon-gamma (IFN-gamma) in an
 individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
 individual having a viral infection. (I) is further useful for
 ameliorating a symptom of an infectious disease caused by a cellular
 pathogen such as mycobacterial disease, malaria, leishmaniasis,
 toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a
 symptom of an immunoglobulin E (IgE)-related disorder, preferably an
 allergy-related disorder, in particular asthma in an individual. The
 present sequence represents an immunomodulatory oligonucleotide which is
 specifically claimed in the present invention

Sequence 10 BP; 1 A; 2 C; 4 G; 3 T; 0 U; 0 Other;

XX SQ

Query Match 68.0%; Score 6.8; DB 6; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANGKTCG 10
 :|||:|
 Db 2 TATCGGTCG 10

RESULT 8

ABQ75150

ID ABQ75150 standard; DNA; 10 BP.

XX

AC ABQ75150;

XX

DT 05-NOV-2002 (first entry)

XX

DE ISS immunomodulatory oligonucleotide SEQ ID NO:81.

XX

Immunostimulatory sequence; ISS: immunomodulatory; immune response;
 allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
 idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
 malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
 immunoglobulin E; IgE-related disorder; antiallergic; antiasthmatic;
 virucide; antibacterial; protozoacide; ss.

OS Synthetic.

XX

XX

XX PH Key Location/Qualifiers

XX FT misc_RNA

XX

XX FT /*tag= a

XX

XX FT /note= "uracil"

XX

XX FT misc_RNA

XX

XX FT /*tag= b

XX

XX FT /note= "uracil"

XX

XX WO200252002-A2.

XX

XX PD 04-JUL-2002.

XX

XX PF 27-DEC-2001; 2001WO-US050821.

XX

XX PR 27-DEC-2000; 2000US-0258675P.

XX

XX PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX

XX PI Fearon KL, Dina D;

XX

XX DR WPI; 2002-657426/70.

XX

XX PS Claim 2; Page 88; 95pp; English.

XX

Immunomodulatory polynucleotide for modulating an immune response in a
 subject suffering from disorders associated with Th2-type immune
 response, e.g. allergy, or infectious disease, comprises an
 immunostimulatory sequence.

Claim 2; Page 88; 95pp; English.

The present invention describes an immunomodulatory polynucleotide (I)
 comprising an immunostimulatory sequence (ISS). Also described: (1) an
 immunomodulatory composition comprising (I); (2) an immunomodulatory
 polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a
 biodegradable MC, where the MC is less than 10 micrometre in size; and
 (3) a kit comprising (I). (I) has antiallergic, antiasthmatic, virucide,
 antibacterial and protozoacide activities, and can be used as a modulator
 of immune response. (I) is useful for modulating an immune response in an
 individual suffering from disorders associated with a Th2-type immune
 response, especially an allergy or asthma, or an infectious disease. (I)
 is also useful for increasing interferon-gamma (IFN-gamma) in an
 individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
 individual having a viral infection. (I) is further useful for
 ameliorating a symptom of an infectious disease caused by a cellular
 pathogen such as mycobacterial disease, malaria, leishmaniasis,
 toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a

CC symptom of an immunoglobulin E (IgE)-related disorder, preferably an
 CC allergy-related disorder, in particular asthma in an individual. The
 CC present sequence represents an immunomodulatory oligonucleotide which is
 CC specifically claimed in the present invention

XX Sequence 10 BP; 2 A; 2 C; 2 G; 2 T; 2 U; 0 Other;
 Query Match 68.0%; Score 6.8; DB 6; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05; 1; Indels 0; Gaps 0;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 : || ||: ||
 Db 2 UACGGTTCG 10
 : || ||: ||

RESULT 9
 ABQ75148
 ID ABQ75148 standard; DNA; 10 BP.
 XX
 AC ABQ75148;
 XX
 DT 05-NOV-2002 (first entry)
 XX
 DE ISS immunomodulatory oligonucleotide SEQ ID NO:79.
 XX
 KW Immunostimulatory sequence; ISS: immunomodulatory; immune response;
 KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
 KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
 KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
 KW immunoglobulin E; IgE-related disorder; antiallergic; antiasthmatic;
 KW virucide; antibacterial; protozoacide; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1 /*tag= a
 FT /mod_base= OTHER
 FT /note= "5-bromocytosine"

WO200252002-A2.
 04-JUL-2002.
 27-DEC-2001; 2001WO-US050821.
 27-DEC-2000; 2000US-0258675P.
 (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 Fearon KL, Dina D;
 WPI; 2002-657426/70.

Immunomodulatory polynucleotide for modulating an immune response in a
 PT subject suffering from disorders associated with Th2-type immune
 PT response, e.g. allergy, or infectious disease, comprises an
 PT immunostimulatory sequence.

XX Claim 2; Page 88; 95pp; English.

XX The present invention describes an immunomodulatory polynucleotide (I)
 CC comprising an immunostimulatory sequence (ISS). Also described: (1) an
 CC immunomodulatory composition comprising (i); (2) an immunomodulatory
 CC polynucleotide/microcarrier (IMP/MC) complex, comprising (i) linked to a
 CC biodegradable MC, where the MC is less than 10 micrometre in size; and
 CC (3) a kit comprising (i). (i) has antiallergic, antiasthmatic, virucide,
 CC antibacterial and protozoacide activities, and can be used as a modulator
 CC of immune response. (i) is useful for modulating an immune response in an
 CC individual suffering from disorders associated with a Th2-type immune
 CC response, especially an allergy or asthma, or an infectious disease. (i)
 CC is also useful for increasing interferon-gamma (IFN-gamma) in an

CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
 CC individual having a viral infection. (i) is further useful for
 CC ameliorating a symptom of an infectious disease caused by a cellular
 CC pathogen such as mycobacterial disease, malaria, leishmaniasis,
 CC toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a
 CC symptom of an immunoglobulin E (IgE)-related disorder, preferably an
 CC allergy-related disorder, in particular asthma in an individual. The
 CC present sequence represents an immunomodulatory oligonucleotide which is
 CC specifically claimed in the present invention

XX Sequence 10 BP; 2 A; 2 C; 3 G; 2 T; 0 U; 1 Other;
 Query Match 68.0%; Score 6.8; DB 6; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05; 1; Indels 0; Gaps 0;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 : || ||: ||
 Db 2 GAACGTTTCG 10
 : || ||: ||

RESULT 10
 ABQ75149
 ID ABQ75149 standard; DNA; 10 BP.
 XX
 AC ABQ75149;
 XX
 DT 05-NOV-2002 (first entry)
 XX
 DE ISS immunomodulatory oligonucleotide SEQ ID NO:80.
 XX
 KW Immunostimulatory sequence; ISS: immunomodulatory; immune response;
 KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
 KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
 KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
 KW immunoglobulin E; IgE-related disorder; antiallergic; antiasthmatic;
 KW virucide; antibacterial; protozoacide; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT misc_RNA 7 /*tag= a
 FT /note= "uracil"

WO200252002-A2.
 04-JUL-2002.
 27-DEC-2001; 2001WO-US050821.
 27-DEC-2000; 2000US-0258675P.
 (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 Fearon KL, Dina D;
 WPI; 2002-657426/70.

Immunomodulatory polynucleotide for modulating an immune response in a
 PT subject suffering from disorders associated with Th2-type immune
 PT response, e.g. allergy, or infectious disease, comprises an
 PT immunostimulatory sequence.

XX Claim 2; Page 88; 95pp; English.

XX The present invention describes an immunomodulatory polynucleotide (I)
 CC comprising an immunostimulatory sequence (ISS). Also described: (1) an
 CC immunomodulatory composition comprising (i); (2) an immunomodulatory
 CC polynucleotide/microcarrier (IMP/MC) complex, comprising (i) linked to a
 CC biodegradable MC, where the MC is less than 10 micrometre in size; and
 CC (3) a kit comprising (i). (i) has antiallergic, antiasthmatic, virucide,
 CC antibacterial and protozoacide activities, and can be used as a modulator
 CC of immune response. (i) is useful for modulating an immune response in an
 CC individual suffering from disorders associated with a Th2-type immune
 CC response, especially an allergy or asthma, or an infectious disease. (i)
 CC is also useful for increasing interferon-gamma (IFN-gamma) in an

CC of immune response. (1) is useful for modulating an immune response in an
 CC individual suffering from disorders associated with a Th2-type immune
 CC response, especially an allergy or asthma, or an infectious disease. (1)
 CC is also useful for increasing interferon-gamma (IFN-gamma) in an
 CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
 CC individual having a viral infection. (1) is further useful for
 CC ameliorating a symptom of an infectious disease caused by a cellular
 CC pathogen such as mycobacterial disease, malaria, leishmaniasis,
 CC toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a
 CC symptom of an immunoglobulin E (IGE)-related disorder, preferably an
 CC allergy-related disorder, in particular asthma in an individual. The
 CC present sequence represents an immunomodulatory oligonucleotide which is
 CC specifically claimed in the present invention

XX Sequence 10 BP; 2 A; 2 C; 2 G; 3 T; 1 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 6; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGRCTG 10
 : |||:
 Db 2 TAACGUTCG 10

RESULT 11

ABQ75134
 ID ABQ75134 standard; DNA; 10 BP.

AC ABQ75134;

XX 05-NOV-2002 (first entry)

XX ISS immunomodulatory oligonucleotide SEQ ID NO:67.

XX Immunostimulatory sequence; ISS: immunomodulatory; immune response;
 KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
 KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
 KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
 KW immunoglobulin E; IGE-related disorder; antiallergic; antiasthmatic;
 KW virucide; antibacterial; protozoacide; ss.

XX Synthetic.

XX Key Location/Qualifiers
 FT misc_RNA 7 /*tag= a
 FT /*note= "uracil"

XX WO200252002-A2.

XX 04-JUL-2002.

XX 27-DEC-2001; 2001WO-US050821.

XX 27-DEC-2000; 2000US-0258675P.

XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX Fearon KL, Dina D;

XX WPI; 2002-657426/70.

XX Immunomodulatory polynucleotide for modulating an immune response in a
 PT subject suffering from disorders associated with Th2-type immune
 PT response, e.g. allergy, or infectious disease, comprises an
 PT immunostimulatory sequence.

PS Claim 3; Page 88; 95pp; English.

XX The present invention describes an immunomodulatory polynucleotide (1)
 CC comprising an immunostimulatory sequence (ISS). Also described: (1) an
 CC immunomodulatory composition comprising (1); (2) an immunomodulatory
 CC immunomodulatory composition comprising (1); (2) an immunomodulatory

CC polynucleotide/microcarrier (IMP/MC) complex, comprising (1) linked to a
 CC biodegradable MC, where the MC is less than 10 micrometre in size; and
 CC (3) a kit comprising (1). (1) has antiallergic, antiasthmatic, virucide,
 CC antibacterial and protozoacide activities, and can be used as a modulator
 CC of immune response. (1) is useful for modulating an immune response in an
 CC individual suffering from disorders associated with a Th2-type immune
 CC response, especially an allergy or asthma, or an infectious disease. (1)
 CC is also useful for increasing interferon-gamma (IFN-gamma) in an
 CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
 CC individual having a viral infection. (1) is further useful for
 CC ameliorating a symptom of an infectious disease caused by a cellular
 CC pathogen such as mycobacterial disease, malaria, leishmaniasis,
 CC toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a
 CC symptom of an immunoglobulin E (IGE)-related disorder, preferably an
 CC allergy-related disorder, in particular asthma in an individual. The
 CC present sequence represents an immunomodulatory oligonucleotide which is
 CC specifically claimed in the present invention

XX Sequence 10 BP; 2 A; 2 C; 2 G; 2 T; 1 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 6; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGRCTG 10
 : |||:
 Db 2 GAACGUTCG 10

RESULT 12

ABQ75143
 ID ABQ75143 standard; DNA; 10 BP.

XX ABQ75143;

XX 05-NOV-2002 (first entry)

XX ISS immunomodulatory oligonucleotide SEQ ID NO:72.

XX Immunostimulatory sequence; ISS: immunomodulatory; immune response;
 KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
 KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
 KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
 KW immunoglobulin E; IGE-related disorder; antiallergic; antiasthmatic;
 KW virucide; antibacterial; protozoacide; ss.

XX Synthetic.

XX WO200252002-A2.

XX 04-JUL-2002.

XX 27-DEC-2001; 2001WO-US050821.

XX 27-DEC-2000; 2000US-0258675P.

XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX Fearon KL, Dina D;

XX WPI; 2002-657426/70.

XX Immunomodulatory polynucleotide for modulating an immune response in a
 PT subject suffering from disorders associated with Th2-type immune
 PT response, e.g. allergy, or infectious disease, comprises an
 PT immunostimulatory sequence.

PS Claim 2; Page 88; 95pp; English.

XX The present invention describes an immunomodulatory polynucleotide (1)
 CC comprising an immunostimulatory sequence (ISS). Also described: (1) an
 CC immunomodulatory composition comprising (1); (2) an immunomodulatory
 CC polynucleotide/microcarrier (IMP/MC) complex, comprising (1) linked to a

CC biodegradable MC, where the MC is less than 10 micrometre in size; and
 CC (3) a kit comprising (I). (I) has anti-allergic, antiasthmatic, virucide,
 CC antibacterial and protozoacide activities, and can be used as a modulator
 CC of immune response. (I) is useful for modulating an immune response in an
 CC individual suffering from disorders associated with a Th2-type immune
 CC response, especially an allergy or asthma, or an infectious disease. (I)
 CC is also useful for increasing interferon-gamma (IFN-gamma) in an
 CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
 CC individual having a viral infection. (I) is further useful for
 CC ameliorating a symptom of an infectious disease caused by a cellular
 CC pathogen such as mycobacterial disease, malaria, leishmaniasis,
 CC toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a
 CC symptom of an immunoglobulin E (IGE)-related disorder, preferably an
 CC allergy-related disorder, in particular asthma in an individual. The
 CC present sequence represents an immunomodulatory oligonucleotide which is
 CC specifically claimed in the present invention

XX Sequence 10 BP; 2 A; 2 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 6; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05; 1; Indels 0; Gaps 0;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 : |||||
 Db 2 TAACGTTGC 10

RESULT 13
 ABQ75202
 ID ABQ75202 standard; DNA; 10 BP.

AC ABQ75202;

DT 05-NOV-2002 (first entry)

XX ISS immunomodulatory oligonucleotide SEQ ID NO:133.

XX Immunostimulatory sequence; ISS: immunomodulatory; immune response;
 KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
 KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
 KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
 KW immunoglobulin E; IGE-related disorder; anti-allergic; antiasthmatic;
 KW virucide; antibacterial; protozoacide; ss.

XX Synthetic.

XX Key Location/Qualifiers

FT modified_base 1 /*tag= a
 FT /mod_base= OTHER
 FT /note= "T, C or 5-bromocytosine"

XX WO200252002-A2.

XX 04-JUL-2002.

XX 27-DEC-2001; 2001WO-US050821.

XX 27-DEC-2000; 2000US-0258675P.

XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX Fearon KL, Dina D;

XX WPI; 2002-657426/70.

XX Immunomodulatory polynucleotide for modulating an immune response in a
 PT subject suffering from disorders associated with Th2-type immune
 PT response, e.g. allergy, or infectious disease, comprises an
 PT immunostimulatory sequence.

XX Disclosure; Page 21; 95pp; English.

XX The present invention describes an immunomodulatory polynucleotide (I)
 CC comprising an immunostimulatory sequence (ISS). Also described: (1) an
 CC immunomodulatory composition comprising (I); (2) an immunomodulatory
 CC polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a
 CC biodegradable MC, where the MC is less than 10 micrometre in size; and
 CC (3) a kit comprising (I). (I) has anti-allergic, antiasthmatic, virucide,
 CC antibacterial and protozoacide activities, and can be used as a modulator
 CC of immune response. (I) is useful for modulating an immune response in an
 CC individual suffering from disorders associated with a Th2-type immune
 CC response, especially an allergy or asthma, or an infectious disease. (I)
 CC is also useful for increasing interferon-gamma (IFN-gamma) in an
 CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
 CC individual having a viral infection. (I) is further useful for
 CC ameliorating a symptom of an infectious disease caused by a cellular
 CC pathogen such as mycobacterial disease, malaria, leishmaniasis,
 CC toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a
 CC symptom of an immunoglobulin E (IGE)-related disorder, preferably an
 CC allergy-related disorder, in particular asthma in an individual. The
 CC present sequence represents an immunomodulatory oligonucleotide from the
 CC present invention

XX Sequence 10 BP; 1 A; 2 C; 2 G; 1 T; 0 U; 4 Other;

Query Match 68.0%; Score 6.8; DB 6; Length 10;
 Best Local Similarity 88.9%; Pred. No. 2e+05; 1; Indels 0; Gaps 0;
 Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 : |||||
 Db 2 DAHCCKTCG 10

RESULT 14

ABQ75142
 ID ABQ75142 standard; DNA; 10 BP.

AC ABQ75142;

XX 05-NOV-2002 (first entry)

XX ISS immunomodulatory oligonucleotide SEQ ID NO:71.

XX Immunostimulatory sequence; ISS: immunomodulatory; immune response;
 KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
 KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
 KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
 KW immunoglobulin E; IGE-related disorder; anti-allergic; antiasthmatic;
 KW virucide; antibacterial; protozoacide; ss.

XX Synthetic.

XX WO200252002-A2.

XX 04-JUL-2002.

XX 27-DEC-2001; 2001WO-US050821.

XX 27-DEC-2000; 2000US-0258675P.

XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX Fearon KL, Dina D;

XX WPI; 2002-657426/70.

XX Immunomodulatory polynucleotide for modulating an immune response in a
 PT subject suffering from disorders associated with Th2-type immune
 PT response, e.g. allergy, or infectious disease, comprises an
 PT immunostimulatory sequence.

XX Claim 2; Page 88; 95pp; English.

CC The present invention describes an immunomodulatory polynucleotide (I) comprising an immunostimulatory sequence (ISS). Also described: (1) an immunomodulatory composition comprising (I); (2) an immunomodulatory polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a biodegradable MC, where the MC is less than 10 micrometre in size; and (3) a kit comprising (I). (I) has anti-allergic, antiasthmatic, virucide, antibacterial and protozoacide activities, and can be used as a modulator of immune response. (I) is useful for modulating an immune response in an individual suffering from disorders associated with a Th2-type immune response, especially an allergy or asthma, or an infectious disease. (I) is also useful for increasing interferon-gamma (IFN-gamma) in an individual having idiopathic pulmonary fibrosis, or IFN-alpha in an individual having a viral infection. (I) is further useful for ameliorating a symptom of an infectious disease caused by a cellular pathogen such as mycobacterial disease, malaria, leishmaniasis, toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a symptom of an immunoglobulin E (IGE)-related disorder, preferably an allergy-related disorder, in particular asthma in an individual. The present sequence represents an immunomodulatory oligonucleotide which is specifically claimed in the present invention

XX Sequence 10 BP; 2 A; 2 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 6; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGRKTCG 10
 : |||: |||
 Db 2 GACGGTCG 10

RESULT 15
 ABQ75129
 ID ABQ75129 standard; DNA; 10 BP.
 AC ABQ75129;
 XX 05-NOV-2002 (first entry)
 XX ISS immunomodulatory oligonucleotide SEQ ID NO:62.
 XX Immunostimulatory sequence; ISS: immunomodulatory; immune response; allergy; asthma; infectious disease; interferon-gamma; IFN-gamma; idiopathic pulmonary fibrosis; viral infection; mycobacterial disease; malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis; immunoglobulin E; IGE-related disorder; anti-allergic; antiasthmatic; virucide; antibacterial; protozoacide; ss.
 XX Synthetic.
 FT Key Location/Qualifiers
 FT modified_base 1 /*tag= a
 FT /mod_base= OTHER
 FT /note= "T, G, C or 5-bromocytosine"
 XX WO200252002-A2.
 XX 04-JUL-2002.
 XX 27-DEC-2001; 2001WO-US050821.
 XX 27-DEC-2000; 2000US-0258675P.
 XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 XX Fearon KL, Dina D;
 XX WPI; 2002-657426/70.
 XX Immunomodulatory polynucleotide for modulating an immune response in a subject suffering from disorders associated with Th2-type immune

PT response, e.g. allergy, or infectious disease, comprises an immunostimulatory sequence.
 XX Claim 1; Page 88; 95pp; English.
 XX The present invention describes an immunomodulatory polynucleotide (I) comprising an immunostimulatory sequence (ISS). Also described: (1) an immunomodulatory composition comprising (I); (2) an immunomodulatory polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a biodegradable MC, where the MC is less than 10 micrometre in size; and (3) a kit comprising (I). (I) has anti-allergic, antiasthmatic, virucide, antibacterial and protozoacide activities, and can be used as a modulator of immune response. (I) is useful for modulating an immune response in an individual suffering from disorders associated with a Th2-type immune response, especially an allergy or asthma, or an infectious disease. (I) is also useful for increasing interferon-gamma (IFN-gamma) in an individual having idiopathic pulmonary fibrosis, or IFN-alpha in an individual having a viral infection. (I) is further useful for ameliorating a symptom of an infectious disease caused by a cellular pathogen such as mycobacterial disease, malaria, leishmaniasis, toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a symptom of an immunoglobulin E (IGE)-related disorder, preferably an allergy-related disorder, in particular asthma in an individual. The present sequence represents an immunomodulatory oligonucleotide from the present invention

XX Sequence 10 BP; 1 A; 2 C; 2 G; 1 T; 0 U; 4 Other;

Query Match 68.0%; Score 6.8; DB 6; Length 10;
 Best Local Similarity 88.9%; Pred. No. 2e+05;
 Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGRKTCG 10
 : |||: |||
 Db 2 DAHCGRKTCG 10

RESULT 16
 ABQ75140
 ID ABQ75140 standard; DNA; 10 BP.
 XX ABQ75140;
 XX 05-NOV-2002 (first entry)
 XX ISS immunomodulatory oligonucleotide SEQ ID NO:69.
 XX Immunostimulatory sequence; ISS: immunomodulatory; immune response; allergy; asthma; infectious disease; interferon-gamma; IFN-gamma; idiopathic pulmonary fibrosis; viral infection; mycobacterial disease; malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis; immunoglobulin E; IGE-related disorder; anti-allergic; antiasthmatic; virucide; antibacterial; protozoacide; ss.
 XX Synthetic.
 XX WO200252002-A2.
 XX 04-JUL-2002.
 XX 27-DEC-2001; 2001WO-US050821.
 XX 27-DEC-2000; 2000US-0258675P.
 XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 XX Fearon KL, Dina D;
 XX WPI; 2002-657426/70.
 XX Immunomodulatory polynucleotide for modulating an immune response in a subject suffering from disorders associated with Th2-type immune response, e.g. allergy, or infectious disease, comprises an

PT immunostimulatory sequence.

XX Claim 2; Page 88; 95pp; English.

XX The present invention describes an immunomodulatory polynucleotide (I) comprising an immunostimulatory sequence (ISS). Also described: (1) an immunomodulatory composition comprising (I); (2) an immunomodulatory polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a biodegradable MC, where the MC is less than 10 micrometre in size; and (3) a kit comprising (I). (I) has anti-allergic, antiasthmatic, virucide, antibacterial and protozoacide activities, and can be used as a modulator of immune response. (I) is useful for modulating an immune response in an individual suffering from disorders associated with a Th2-type immune response, especially an allergy or asthma, or an infectious disease. (I) is also useful for increasing interferon-gamma (IFN-gamma) in an individual having idiopathic pulmonary fibrosis, or IFN-alpha in an individual having a viral infection. (I) is further useful for ameliorating a symptom of an infectious disease caused by a cellular pathogen such as mycobacterial disease, malaria, leishmaniasis, toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a symptom of an immunoglobulin E (IgE)-related disorder, preferably an allergy-related disorder, in particular asthma in an individual. The present sequence represents an immunomodulatory oligonucleotide which is specifically claimed in the present invention

XX Sequence 10 BP; 1 A; 2 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 6; Length 10;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
Db 2 GATCGGTCG 10

RESULT 17

ABQ75131
ID ABQ75131 standard; DNA; 10 BP.

AC ABQ75131;

XX 05-NOV-2002 (first entry)

XX ISS immunomodulatory oligonucleotide SEQ ID NO:64.

XX Immunostimulatory sequence; ISS: immunomodulatory; immune response;
allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
immunoglobulin E; IgE-related disorder; anti-allergic; antiasthmatic;
virucide; antibacterial; protozoacide; ss.

XX Synthetic.

XX WO200252002-A2.

XX 04-JUL-2002.

XX 27-DEC-2001; 2001WO-US050821.

XX 27-DEC-2000; 2000US-0258675P.

XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX Fearon KL, Dina D;

XX WPI; 2002-657426/70.

XX Immunomodulatory polynucleotide for modulating an immune response in a
PT subject suffering from disorders associated with Th2-type immune
PT response, e.g. allergy, or infectious disease, comprises an
PT immunostimulatory sequence.

XX Disclosure; Page 5; 95pp; English.

XX The present invention describes an immunomodulatory polynucleotide (I) comprising an immunostimulatory sequence (ISS). Also described: (1) an immunomodulatory composition comprising (I); (2) an immunomodulatory polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a biodegradable MC, where the MC is less than 10 micrometre in size; and (3) a kit comprising (I). (I) has anti-allergic, antiasthmatic, virucide, antibacterial and protozoacide activities, and can be used as a modulator of immune response. (I) is useful for modulating an immune response in an individual suffering from disorders associated with a Th2-type immune response, especially an allergy or asthma, or an infectious disease. (I) is also useful for increasing interferon-gamma (IFN-gamma) in an individual having idiopathic pulmonary fibrosis, or IFN-alpha in an individual having a viral infection. (I) is further useful for ameliorating a symptom of an infectious disease caused by a cellular pathogen such as mycobacterial disease, malaria, leishmaniasis, toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a symptom of an immunoglobulin E (IgE)-related disorder, preferably an allergy-related disorder, in particular asthma in an individual. The present sequence represents an immunomodulatory oligonucleotide which is specifically not claimed in the present invention

XX Sequence 10 BP; 2 A; 2 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 6; Length 10;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
Db 2 GAACGTTTCG 10

RESULT 18

ABQ75139

ID ABQ75139 standard; DNA; 10 BP.

AC ABQ75139;

XX 05-NOV-2002 (first entry)

XX ISS immunomodulatory oligonucleotide SEQ ID NO:68.

XX Immunostimulatory sequence; ISS: immunomodulatory; immune response;
allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
immunoglobulin E; IgE-related disorder; anti-allergic; antiasthmatic;
virucide; antibacterial; protozoacide; ss.

XX Synthetic.

XX WO200252002-A2.

XX 04-JUL-2002.

XX 27-DEC-2001; 2001WO-US050821.

XX 27-DEC-2000; 2000US-0258675P.

XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX Fearon KL, Dina D;

XX WPI; 2002-657426/70.

XX Immunomodulatory polynucleotide for modulating an immune response in a
PT subject suffering from disorders associated with Th2-type immune
PT response, e.g. allergy, or infectious disease, comprises an
PT immunostimulatory sequence.

PS Claim 2; Page 88; 95pp; English.

XX The present invention describes an immunomodulatory polynucleotide (I) comprising an immunostimulatory sequence (ISS). Also described: (1) an immunomodulatory composition comprising (I); (2) an immunomodulatory polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a biodegradable MC, where the MC is less than 10 micrometre in size; and (3) a kit comprising (I). (I) has anti-allergic, antiasthmatic, virucide, antibacterial and protozoacide activities, and can be used as a modulator of immune response. (I) is useful for modulating an immune response in an individual suffering from disorders associated with a Th2-type immune response, especially an allergy or asthma, or an infectious disease. (I) is also useful for increasing interferon-gamma (IFN-gamma) in an individual having idiopathic pulmonary fibrosis, or IFN-alpha in an individual having a viral infection. (I) is further useful for ameliorating a symptom of an infectious disease caused by a cellular pathogen such as mycobacterial disease, malaria, leishmaniasis, toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a symptom of an immunoglobulin E (IgE)-related disorder, preferably an allergy-related disorder, in particular asthma in an individual. The present sequence represents an immunomodulatory oligonucleotide which is specifically claimed in the present invention

XX Sequence 10 BP; 1 A; 3 C; 3 G; 3 T; 0 U; 0 Other;

SQ Query Match 68.0%; Score 6.8; DB 6; Length 10;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANGKTCG 10
Db :|||:||||

2 GACCGTCG 10

RESULT 19

ABQ75145

ID ABQ75145 standard; DNA; 10 BP.

XX AC ABQ75145;

XX 05-NOV-2002 (first entry)

XX ISS immunomodulatory oligonucleotide SEQ ID NO:74.

XX Immunostimulatory sequence; ISS: immunomodulatory; immune response; allergy; asthma; infectious disease; interferon-gamma; IFN-gamma; idiopathic pulmonary fibrosis; viral infection; mycobacterial disease; malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis; immunoglobulin E; IgE-related disorder; anti-allergic; antiasthmatic; virucide; antibacterial; protozoacide; ss.

XX Synthetic.

OS WO200252002-A2.

PN 04-JUL-2002.

XX 27-DEC-2001; 2001WO-US050821.

XX 27-DEC-2000; 2000US-0258675P.

XX (DYNA-) DYNAX TECHNOLOGIES CORP.

XX Fearon KL, Dina D;

XX WPI; 2002-657426/70.

XX Immunomodulatory polynucleotide for modulating an immune response in a subject suffering from disorders associated with Th2-type immune response, e.g. allergy, or infectious disease, comprises an immunostimulatory sequence.

XX Claim 2; Page 88; 95pp; English.

XX The present invention describes an immunomodulatory polynucleotide (I) comprising an immunostimulatory sequence (ISS). Also described: (1) an immunomodulatory composition comprising (I); (2) an immunomodulatory polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a biodegradable MC, where the MC is less than 10 micrometre in size; and (3) a kit comprising (I). (I) has anti-allergic, antiasthmatic, virucide, antibacterial and protozoacide activities, and can be used as a modulator of immune response. (I) is useful for modulating an immune response in an individual suffering from disorders associated with a Th2-type immune response, especially an allergy or asthma, or an infectious disease. (I) is also useful for increasing interferon-gamma (IFN-gamma) in an individual having idiopathic pulmonary fibrosis, or IFN-alpha in an individual having a viral infection. (I) is further useful for ameliorating a symptom of an infectious disease caused by a cellular pathogen such as mycobacterial disease, malaria, leishmaniasis, toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a symptom of an immunoglobulin E (IgE)-related disorder, preferably an allergy-related disorder, in particular asthma in an individual. The present sequence represents an immunomodulatory oligonucleotide which is specifically claimed in the present invention

XX Sequence 10 BP; 1 A; 3 C; 3 G; 3 T; 0 U; 0 Other;

SQ Query Match 68.0%; Score 6.8; DB 6; Length 10;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANGKTCG 10
Db :|||:||||

2 TACCGTCG 10

RESULT 20

ABQ75146

ID ABQ75146 standard; DNA; 10 BP.

XX AC ABQ75146;

XX 05-NOV-2002 (first entry)

XX ISS immunomodulatory oligonucleotide SEQ ID NO:76.

XX Immunostimulatory sequence; ISS: immunomodulatory; immune response; allergy; asthma; infectious disease; interferon-gamma; IFN-gamma; idiopathic pulmonary fibrosis; viral infection; mycobacterial disease; malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis; immunoglobulin E; IgE-related disorder; anti-allergic; antiasthmatic; virucide; antibacterial; protozoacide; ss.

XX Synthetic.

OS Key modified_base 1 Location/Qualifiers

FH /*tag= a

FT /mod_base= OTHER

FT /note= "5-bromocytosine"

XX WO200252002-A2.

PN 04-JUL-2002.

XX 27-DEC-2001; 2001WO-US050821.

XX 27-DEC-2000; 2000US-0258675P.

XX (DYNA-) DYNAX TECHNOLOGIES CORP.

XX Fearon KL, Dina D;

XX WPI; 2002-657426/70.

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PT subject suffering from disorders associated with Th2-type immune
PT response, e.g. allergy, or infectious disease, comprises an
PT immunostimulatory sequence.

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XX The present invention describes an immunomodulatory polynucleotide (I)
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CC immunomodulatory composition comprising (I); (2) an immunomodulatory
CC polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a
CC biodegradable MC, where the MC is less than 10 micrometre in size; and
CC (3) a kit comprising (I). (I) has anti-allergic, antiasthmatic, virucide,
CC antibacterial and protozoacide activities, and can be used as a modulator
CC of immune response. (I) is useful for modulating an immune response in an
CC individual suffering from disorders associated with a Th2-type immune
CC response, especially an allergy or asthma, or an infectious disease. (I)
CC is also useful for increasing interferon-gamma (IFN-gamma) in an
CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
CC individual having a viral infection. (I) is further useful for
CC ameliorating a symptom of an infectious disease caused by a cellular
CC pathogen such as mycobacterial disease, malaria, leishmaniasis,
CC toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a
CC symptom of an immunoglobulin E (IgE)-related disorder, preferably an
CC allergy-related disorder, in particular asthma in an individual. The
CC present sequence represents an immunomodulatory oligonucleotide which is
CC specifically claimed in the present invention

XX Sequence 10 BP; 1 A; 3 C; 3 G; 2 T; 0 U; 1 Other;

Query Match 68.0%; Score 6.8; DB 6; Length 10;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCTCG 10
DB : ||: ||:
2 GACCGTTCG 10

RESULT 21

ABQ75151
ID ABQ75151 standard; DNA; 10 BP.

XX AC ABQ75151;

XX DT 05-NOV-2002 (first entry)

XX DE ISS immunomodulatory oligonucleotide SEQ ID NO:82.

XX KW Immunostimulatory sequence; ISS: immunomodulatory; immune response;
KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
KW immunoglobulin E; IgE-related disorder; anti-allergic; antiasthmatic;
KW virucide; antibacterial; protozoacide; ss.

XX OS Synthetic.

XX PN WO200252002-A2.

XX PD 04-JUL-2002.

XX PF 27-DEC-2001; 2001WO-US050821.

XX PR 27-DEC-2000; 2000US-0258675P.

XX PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX PI Fearon KL, Dina D;

XX DR WPI; 2002-657426/70.

XX Immunomodulatory polynucleotide for modulating an immune response in a
PT subject suffering from disorders associated with Th2-type immune

PT response, e.g. allergy, or infectious disease, comprises an
PT immunostimulatory sequence.

PS Claim 2; Page 88; 95pp; English.

XX The present invention describes an immunomodulatory polynucleotide (I)
CC comprising an immunostimulatory sequence (ISS). Also described: (1) an
CC immunomodulatory composition comprising (I); (2) an immunomodulatory
CC polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a
CC biodegradable MC, where the MC is less than 10 micrometre in size; and
CC (3) a kit comprising (I). (I) has anti-allergic, antiasthmatic, virucide,
CC antibacterial and protozoacide activities, and can be used as a modulator
CC of immune response. (I) is useful for modulating an immune response in an
CC individual suffering from disorders associated with a Th2-type immune
CC response, especially an allergy or asthma, or an infectious disease. (I)
CC is also useful for increasing interferon-gamma (IFN-gamma) in an
CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
CC individual having a viral infection. (I) is further useful for
CC ameliorating a symptom of an infectious disease caused by a cellular
CC pathogen such as mycobacterial disease, malaria, leishmaniasis,
CC toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a
CC symptom of an immunoglobulin E (IgE)-related disorder, preferably an
CC allergy-related disorder, in particular asthma in an individual. The
CC present sequence represents an immunomodulatory oligonucleotide which is
CC specifically claimed in the present invention

XX Sequence 10 BP; 2 A; 2 C; 2 G; 4 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 6; Length 10;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCTCG 10
DB : ||: ||:
2 TAACGTTCG 10

RESULT 22

ABQ75147

ID ABQ75147 standard; DNA; 10 BP.

XX AC ABQ75147;

XX DT 05-NOV-2002 (first entry)

XX DE ISS immunomodulatory oligonucleotide SEQ ID NO:78.

XX KW Immunostimulatory sequence; ISS: immunomodulatory; immune response;
KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
KW immunoglobulin E; IgE-related disorder; anti-allergic; antiasthmatic;
KW virucide; antibacterial; protozoacide; ss.

XX OS Synthetic.

XX PN WO200252002-A2.

XX PD 04-JUL-2002.

XX PF 27-DEC-2001; 2001WO-US050821.

XX PR 27-DEC-2000; 2000US-0258675P.

XX PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX PI Fearon KL, Dina D;

XX DR WPI; 2002-657426/70.

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PT subject suffering from disorders associated with Th2-type immune
PT response, e.g. allergy, or infectious disease, comprises an

PT immunostimulatory sequence.

PS Claim 2; Page 88; 95pp; English.

XX The present invention describes an immunomodulatory polynucleotide (I) comprising an immunostimulatory sequence (ISS). Also described: (1) an immunomodulatory composition comprising (I); (2) an immunomodulatory polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a biodegradable MC, where the MC is less than 10 micrometre in size; and (3) a kit comprising (I). (I) has anti-allergic, antiasthmatic, virucide, antibacterial and protozoacide activities, and can be used as a modulator of immune response. (I) is useful for modulating an immune response in an individual suffering from disorders associated with a Th2-type immune response, especially an allergy or asthma, or an infectious disease. (I) is also useful for increasing interferon-gamma (IFN-gamma) in an individual having idiopathic pulmonary fibrosis, or IFN-alpha in an individual having a viral infection. (I) is further useful for ameliorating a symptom of an infectious disease caused by a cellular pathogen such as mycobacterial disease, malaria, leishmaniasis, toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a symptom of an immunoglobulin E (IgE)-related disorder, preferably an allergy-related disorder, in particular asthma in an individual. The present sequence represents an immunomodulatory oligonucleotide which is specifically claimed in the present invention

XX Sequence 10 BP; 1 A; 4 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 6; Length 10;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCTG 10
: ||:|
Db 2 GACCGTCTG 10

RESULT 23

ABQ75147/c

ID ABQ75147 standard; DNA; 10 BP.

XX

AC ABQ75147;

XX

DT 05-NOV-2002 (first entry)

XX

DE ISS immunomodulatory oligonucleotide SEQ ID NO:78.

XX

XX Immunostimulatory sequence; ISS: immunomodulatory; immune response; allergy; asthma; infectious disease; interferon-gamma; IFN-gamma; idiopathic pulmonary fibrosis; viral infection; mycobacterial disease; malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis; immunoglobulin E; IgE-related disorder; anti-allergic; antiasthmatic; virucide; antibacterial; protozoacide; ss.

XX

OS Synthetic.

XX

XX WO200252002-A2.

XX

PD 04-JUL-2002.

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PF 27-DEC-2001; 2001WO-US050821.

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PR 27-DEC-2000; 2000US-0258675P.

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XX (DYNA-) DYNAXX TECHNOLOGIES CORP.

XX

PI Fearon KL, Dina D;

XX

XX WPI; 2002-657426/70.

XX

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PS The present invention describes an immunomodulatory polynucleotide (I) comprising an immunostimulatory sequence (ISS). Also described: (1) an immunomodulatory composition comprising (I); (2) an immunomodulatory polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a biodegradable MC, where the MC is less than 10 micrometre in size; and (3) a kit comprising (I). (I) has anti-allergic, antiasthmatic, virucide, antibacterial and protozoacide activities, and can be used as a modulator of immune response. (I) is useful for modulating an immune response in an individual suffering from disorders associated with a Th2-type immune response, especially an allergy or asthma, or an infectious disease. (I) is also useful for increasing interferon-gamma (IFN-gamma) in an individual having idiopathic pulmonary fibrosis, or IFN-alpha in an individual having a viral infection. (I) is further useful for ameliorating a symptom of an infectious disease caused by a cellular pathogen such as mycobacterial disease, malaria, leishmaniasis, toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a symptom of an immunoglobulin E (IgE)-related disorder, preferably an allergy-related disorder, in particular asthma in an individual. The present sequence represents an immunomodulatory oligonucleotide which is specifically claimed in the present invention

XX Sequence 10 BP; 1 A; 4 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 6; Length 10;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCTG 10
: ||:|
Db 9 GAACGGTCTG 1

RESULT 24

ADB88804

ID ADB88804 standard; DNA; 10 BP.

XX

AC ADB88804;

XX

DT 04-DEC-2003 (first entry)

XX

DE Chimeric immunomodulatory compound DNA sequence, SEQ ID No 7.

XX

XX Chimeric immunomodulatory compound; CIC; immunomodulatory activity; spacer moiety; linear hexaethylene glycol structure; HEG; immune; Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma; IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating; immunoglobulin E; IgE; allergy; cancer; stimulating cellular immune system cell; ss.

XX

OS Synthetic.

XX

XX WO2003000922-A2.

XX

PD 03-JAN-2003.

XX

PF 21-JUN-2002; 2002WO-US020025.

XX

XX 21-JUN-2001; 2001US-0299883P.

PR 23-APR-2002; 2002US-0375253P.

XX

XX (DYNA-) DYNAXX TECHNOLOGIES CORP.

XX

PI Fearon KL, Dina D, Tuck SF;

XX

XX WPI; 2003-210159/20.

XX

XX Novel chimeric immunomodulatory compound having immunomodulatory activity, useful for modulating an immune response and for treating cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.

PS Disclosure; Page 32; 224pp; English.

XX The invention relates to a novel chimeric immunomodulatory compound (CIC)
 CC having immunomodulatory activity, comprising two or more nucleic acid
 CC moieties and one or more non-nucleic acid spacer moieties, where at least
 CC one non-nucleic acid spacer moiety is covalently joined to two nucleic
 CC acid moieties, where the spacer is not a polypeptide, and at least one
 CC nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric
 CC immunomodulatory compounds more specifically contain the nucleic acid
 CC spacer moieties of linear hexaethylene glycol structure (HEG) subunits.
 CC CIC's are useful for modulating an immune response in an individual,
 CC where the individual suffers from a disorder associated with a Th2-type
 CC immune response which is an allergy or allergy-induced asthma, and an
 CC infectious disease. CIC is also useful for increasing IFN-gamma; or IFN-
 CC alpha; in an individual, where the individual has idiopathic pulmonary
 CC fibrosis, or a viral infection. CIC's are useful for ameliorating a
 CC symptom of an infectious disease, or an immunoglobulin E (IgE)-related
 CC disorder in an individual, where the IgE-related disorder is allergy, or
 CC an allergy-related disorder. CIC's are also useful for treating cancer
 CC and can be used for stimulating cellular immune system cells production
 CC in an individual. This polynucleotide sequence represents a DNA sequence
 CC which is a nucleic acid moiety part of a chimeric immunomodulatory compound
 CC of the invention.

XX Sequence 10 BP; 2 A; 2 C; 3 G; 2 T; 1 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 9; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGKTCG 10
 :|||:
 Db 2 GAACGTCG 10

RESULT 25

ADB88818
 ID ADB88818 standard; DNA; 10 BP.

AC ADB88818;

XX 04-DEC-2003 (first entry)

XX Chimeric immunomodulatory compound DNA sequence, SEQ ID No 21.

XX Chimeric immunomodulatory compound; CIC; immunomodulatory activity;
 KW spacer moiety; linear hexaethylene glycol structure; HEG; immune;
 KW Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma;
 KW IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating;
 KW immunoglobulin E; IgE; allergy; cancer;
 KW stimulating cellular immune system cell; ss.

XX Synthetic.

OS WO2003000922-A2.

PN 03-JAN-2003.

XX 21-JUN-2002; 2002WO-US020025.

XX 21-JUN-2001; 2001US-0299883P.

PR 23-APR-2002; 2002US-0375253P.

XX (DYNA-) DYNAXVAX TECHNOLOGIES CORP.

XX Fearon KL, Dina D, Tuck SF;

XX WPI; 2003-210159/20.

XX Novel chimeric immunomodulatory compound having immunomodulatory
 PT activity, useful for modulating an immune response and for treating
 PT cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.

XX

PS Disclosure; Page 33; 224pp; English.

XX The invention relates to a novel chimeric immunomodulatory compound (CIC)
 CC having immunomodulatory activity, comprising two or more nucleic acid
 CC moieties and one or more non-nucleic acid spacer moieties, where at least
 CC one non-nucleic acid spacer moiety is covalently joined to two nucleic
 CC acid moieties, where the spacer is not a polypeptide, and at least one
 CC nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric
 CC immunomodulatory compounds more specifically contain the nucleic acid
 CC spacer moieties of linear hexaethylene glycol structure (HEG) subunits.
 CC CIC's are useful for modulating an immune response in an individual,
 CC where the individual suffers from a disorder associated with a Th2-type
 CC immune response which is an allergy or allergy-induced asthma, and an
 CC infectious disease. CIC is also useful for increasing IFN-gamma; or IFN-
 CC alpha; in an individual, where the individual has idiopathic pulmonary
 CC fibrosis, or a viral infection. CIC's are useful for ameliorating a
 CC symptom of an infectious disease, or an immunoglobulin E (IgE)-related
 CC disorder in an individual, where the IgE-related disorder is allergy, or
 CC an allergy-related disorder. CIC's are also useful for treating cancer
 CC and can be used for stimulating cellular immune system cells production
 CC in an individual. This polynucleotide sequence represents a DNA sequence
 CC which is a nucleic acid moiety part of a chimeric immunomodulatory compound
 CC of the invention.

XX Sequence 10 BP; 2 A; 2 C; 2 G; 2 T; 2 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 9; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGKTCG 10
 :|||:
 Db 2 UAACGTCG 10

RESULT 26

ADB88815

ID ADB88815 standard; DNA; 10 BP.

AC ADB88815;

XX 04-DEC-2003 (first entry)

XX Chimeric immunomodulatory compound DNA sequence, SEQ ID No 18.

XX Chimeric immunomodulatory compound; CIC; immunomodulatory activity;
 KW spacer moiety; linear hexaethylene glycol structure; HEG; immune;
 KW Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma;
 KW IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating;
 KW immunoglobulin E; IgE; allergy; cancer;
 KW stimulating cellular immune system cell; ss.

XX Synthetic.

OS WO2003000922-A2.

PN 03-JAN-2003.

XX 21-JUN-2002; 2002WO-US020025.

XX 21-JUN-2001; 2001US-0299883P.

PR 23-APR-2002; 2002US-0375253P.

XX (DYNA-) DYNAXVAX TECHNOLOGIES CORP.

XX Fearon KL, Dina D, Tuck SF;

XX WPI; 2003-210159/20.

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 PT activity, useful for modulating an immune response and for treating
 PT cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.

XX

PS Disclosure; Page 33; 224pp; English.

XX The invention relates to a novel chimeric immunomodulatory compound (CIC) having immunomodulatory activity, comprising two or more nucleic acid moieties and one or more non-nucleic acid spacer moieties, where at least one non-nucleic acid spacer moiety is covalently joined to two nucleic acid moieties, where the spacer is not a polypeptide, and at least one nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric immunomodulatory compounds more specifically contain the nucleic acid spacer moieties of linear hexaethylene glycol structure (HEG) subunits. CIC's are useful for modulating an immune response in an individual, where the individual suffers from a disorder associated with a Th2-type immune response which is an allergy or allergy-induced asthma, and an infectious disease. CIC is also useful for increasing IFN-gamma, and an alpha; in an individual, where the individual has idiopathic pulmonary fibrosis, or a viral infection. CIC's are useful for ameliorating a symptom of an infectious disease, or an immunoglobulin E (IgE)-related disorder in an individual, where the IgE-related disorder is allergy, or an allergy-related disorder. CIC's are also useful for treating cancer and can be used for stimulating cellular immune system cells production in an individual. This polynucleotide sequence represents a DNA sequence which is a nucleic acid moiety part of a chimeric immunomodulatory compound of the invention.

XX SQ Sequence 10 BP; 1 A; 4 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 9; Length 10;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||||
DB 2 GACCGTTCG 10

RESULT 27

ADB88815/c

ID ADB88815 standard; DNA; 10 BP.

XX ADB88815;

XX 04-DEC-2003 (first entry)

XX Chimeric immunomodulatory compound DNA sequence, SEQ ID No 18.

XX Chimeric immunomodulatory compound; CIC; immunomodulatory activity; spacer moiety; linear hexaethylene glycol structure; HEG; immune; Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma; IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating; immunoglobulin E; IgE; allergy; cancer; stimulating cellular immune system cell; ss.

XX Synthetic.

XX WO2003000922-A2.

XX 03-JAN-2003.

XX 21-JUN-2002; 2002WO-US020025.

XX 21-JUN-2001; 2001US-0299883P.

XX 23-APR-2002; 2002US-0375253P.

XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX Fearon KL, Dina D, Tuck SF;

XX WPI; 2003-210159/20.

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XX SQ Sequence 10 BP; 1 A; 4 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 9; Length 10;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||||
DB 9 GAACGGTTCG 1

RESULT 28

ADB88816

ID ADB88816 standard; DNA; 10 BP.

XX ADB88816;

XX 04-DEC-2003 (first entry)

XX Chimeric immunomodulatory compound DNA sequence, SEQ ID No 19.

XX Chimeric immunomodulatory compound; CIC; immunomodulatory activity; spacer moiety; linear hexaethylene glycol structure; HEG; immune; Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma; IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating; immunoglobulin E; IgE; allergy; cancer; stimulating cellular immune system cell; ss.

XX Synthetic.

XX WO2003000922-A2.

XX 03-JAN-2003.

XX 21-JUN-2002; 2002WO-US020025.

XX 21-JUN-2001; 2001US-0299883P.

XX 23-APR-2002; 2002US-0375253P.

XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX Fearon KL, Dina D, Tuck SF;

XX WPI; 2003-210159/20.

XX Novel chimeric immunomodulatory compound having immunomodulatory activity, useful for modulating an immune response and for treating cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.

PS Disclosure; Page 33; 224pp; English.

XX The invention relates to a novel chimeric immunomodulatory compound (CIC)

CC having immunomodulatory activity, comprising two or more nucleic acid

CC moieties and one or more non-nucleic acid spacer moieties, where at least

CC one non-nucleic acid spacer moiety is covalently joined to two nucleic

CC acid moieties, where the spacer is not a polypeptide, and at least one

CC nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric

CC immunomodulatory compounds more specifically contain the nucleic acid

CC spacer moieties of linear hexaethylene glycol structure (HEG) subunits.

CC CIC's are useful for modulating an immune response in an individual,

CC where the individual suffers from a disorder associated with a Th2-type

CC immune response which is an allergy or allergy-induced asthma, and an

CC infectious disease. CIC is also useful for increasing IFN-gamma; or IFN-

CC alpha; in an individual, where the individual has idiopathic pulmonary

CC fibrosis, or a viral infection. CIC's are useful for ameliorating a

CC symptom of an infectious disease, or an immunoglobulin E (IgE)-related

CC disorder in an individual, where the IgE-related disorder is allergy, or

CC an allergy-related disorder. CIC's are also useful for treating cancer

CC and can be used for stimulating cellular immune system cells production

CC in an individual. This polynucleotide sequence represents a DNA sequence

CC which is a nucleic acid moiety part of a chimeric immunomodulatory compound

CC of the invention.

XX

XX Sequence 10 BP; 2 A; 2 C; 3 G; 2 T; 0 U; 1 Other;

SQ

Query Match 68.0%; Score 6.8; DB 9; Length 10;

Best Local Similarity 66.7%; Pred. No. 2e+05;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

Db :|||:|

2 GACGCTCG 10

RESULT 29

ADB8807

ID ADB88807 standard; DNA; 10 BP.

XX

AC ADB88807;

XX

XX 04-DEC-2003 (first entry)

XX

XX Chimeric immunomodulatory compound DNA sequence, SEQ ID No 10.

XX

KW chimeric immunomodulatory compound; CIC; immunomodulatory activity;

KW spacer moiety; linear hexaethylene glycol structure; HEG; immune;

KW Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma;

KW IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating;

KW immunoglobulin E; IgE; allergy; cancer;

KW stimulating cellular immune system cell; ss.

XX

OS Synthetic.

XX

XX WO2003000922-A2.

XX

XX 03-JAN-2003.

XX

XX 21-JUN-2002; 2002WO-US020025.

XX

XX 21-JUN-2001; 2001US-0299883P.

XX

XX 23-APR-2002; 2002US-0375253P.

XX

XX (DYNA-) DYNAXX TECHNOLOGIES CORP.

XX

XX Fearon KL, Dina D, Tuck SF;

XX

XX WPI; 2003-210159/20.

XX

XX Novel chimeric immunomodulatory compound having immunomodulatory

XX activity, useful for modulating an immune response and for treating

XX cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.

XX

PS Disclosure; Page 32; 224pp; English.

XX The invention relates to a novel chimeric immunomodulatory compound (CIC)

CC having immunomodulatory activity, comprising two or more nucleic acid

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CC alpha; in an individual, where the individual has idiopathic pulmonary

CC fibrosis, or a viral infection. CIC's are useful for ameliorating a

CC symptom of an infectious disease, or an immunoglobulin E (IgE)-related

CC disorder in an individual, where the IgE-related disorder is allergy, or

CC an allergy-related disorder. CIC's are also useful for treating cancer

CC and can be used for stimulating cellular immune system cells production

CC in an individual. This polynucleotide sequence represents a DNA sequence

CC which is a nucleic acid moiety part of a chimeric immunomodulatory compound

CC of the invention.

XX

XX Sequence 10 BP; 1 A; 2 C; 3 G; 4 T; 0 U; 0 Other;

SQ

Query Match 68.0%; Score 6.8; DB 9; Length 10;

Best Local Similarity 66.7%; Pred. No. 2e+05;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

Db :|||:|

2 GATCGTTCG 10

RESULT 30

ADB8805

ID ADB88805 standard; DNA; 10 BP.

XX

AC ADB88805;

XX

XX 04-DEC-2003 (first entry)

XX

XX Chimeric immunomodulatory compound DNA sequence, SEQ ID No 8.

XX

KW chimeric immunomodulatory compound; CIC; immunomodulatory activity;

KW spacer moiety; linear hexaethylene glycol structure; HEG; immune;

KW Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma;

KW IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating;

KW immunoglobulin E; IgE; allergy; cancer;

KW stimulating cellular immune system cell; ss.

XX

OS Synthetic.

XX

XX WO2003000922-A2.

XX

XX 03-JAN-2003.

XX

XX 21-JUN-2002; 2002WO-US020025.

XX

XX 21-JUN-2001; 2001US-0299883P.

XX

XX 23-APR-2002; 2002US-0375253P.

XX

XX (DYNA-) DYNAXX TECHNOLOGIES CORP.

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XX Fearon KL, Dina D, Tuck SF;

XX

XX WPI; 2003-210159/20.

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XX Novel chimeric immunomodulatory compound having immunomodulatory

XX activity, useful for modulating an immune response and for treating

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PS Disclosure; Page 32; 224pp; English.

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XX SQ Sequence 10 BP; 1 A; 3 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 9; Length 10;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||||
DB 2 GACCGTTCG 10

RESULT 31

ADB88813

ID ADB88813 standard; DNA; 10 BP.

XX ADB88813;

XX 04-DEC-2003 (first entry)

XX Chimeric immunomodulatory compound DNA sequence, SEQ ID No 16.

XX Chimeric immunomodulatory compound; CIC; immunomodulatory activity; spacer moiety; linear hexaethylene glycol structure; HEG; immune; Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma; IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating; immunoglobulin E; IgE; allergy; cancer; stimulating cellular immune system cell; ss.

XX Synthetic.

XX WO2003000922-A2.

XX 03-JAN-2003.

XX 21-JUN-2002; 2002WO-US020025.

XX 21-JUN-2001; 2001US-0299883P.

XX 23-APR-2002; 2002US-0375253P.

XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX Fearon KL, Dina D, Tuck SF;
WPI; 2003-210159/20.

XX Novel chimeric immunomodulatory compound having immunomodulatory activity, useful for modulating an immune response and for treating cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.

PS Disclosure; Page 33; 224pp; English.

XX The invention relates to a novel chimeric immunomodulatory compound (CIC) having immunomodulatory activity, comprising two or more nucleic acid moieties and one or more non-nucleic acid spacer moieties, where at least one non-nucleic acid spacer moiety is covalently joined to two nucleic acid moieties, where the spacer is not a polypeptide, and at least one nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric immunomodulatory compounds more specifically contain the nucleic acid spacer moieties of linear hexaethylene glycol structure (HEG) subunits. CIC's are useful for modulating an immune response in an individual, where the individual suffers from a disorder associated with a Th2-type immune response which is an allergy or allergy-induced asthma, and an infectious disease. CIC is also useful for increasing IFN-gamma; or IFN-alpha; in an individual, where the individual has idiopathic pulmonary fibrosis, or a viral infection. CIC's are useful for ameliorating a symptom of an infectious disease, or an immunoglobulin E (IgE)-related disorder in an individual, where the IgE-related disorder is allergy, or an allergy-related disorder. CIC's are also useful for treating cancer and can be used for stimulating cellular immune system cells production in an individual. This polynucleotide sequence represents a DNA sequence which is a nucleic acid moiety part of a chimeric immunomodulatory compound of the invention.

XX SQ Sequence 10 BP; 1 A; 3 C; 3 G; 2 T; 0 U; 1 Other;

Query Match 68.0%; Score 6.8; DB 9; Length 10;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||||
DB 2 GACCGTTCG 10

RESULT 32

ADB88811

ID ADB88811 standard; DNA; 10 BP.

XX ADB88811;

XX 04-DEC-2003 (first entry)

XX Chimeric immunomodulatory compound DNA sequence, SEQ ID No 14.

XX Chimeric immunomodulatory compound; CIC; immunomodulatory activity; spacer moiety; linear hexaethylene glycol structure; HEG; immune; Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma; IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating; immunoglobulin E; IgE; allergy; cancer; stimulating cellular immune system cell; ss.

XX Synthetic.

XX WO2003000922-A2.

XX 03-JAN-2003.

XX 21-JUN-2002; 2002WO-US020025.

XX 21-JUN-2001; 2001US-0299883P.

XX 23-APR-2002; 2002US-0375253P.

XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX Fearon KL, Dina D, Tuck SF;
WPI; 2003-210159/20.

XX Novel chimeric immunomodulatory compound having immunomodulatory activity, useful for modulating an immune response and for treating cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.

PS Disclosure; Page 32; 224pp; English.

XX The invention relates to a novel chimeric immunomodulatory compound (CIC)
 CC having immunomodulatory activity, comprising two or more nucleic acid
 CC moieties and one or more non-nucleic acid spacer moieties, where at least
 CC one non-nucleic acid spacer moiety is covalently joined to two nucleic
 CC acid moieties, where the spacer is not a polypeptide, and at least one
 CC nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric
 CC immunomodulatory compounds more specifically contain the nucleic acid
 CC spacer moieties of linear hexaethylene glycol structure (HEG) subunits.
 CC CIC's are useful for modulating an immune response in an individual,
 CC where the individual suffers from a disorder associated with a Th2-type
 CC immune response which is an allergy or allergy-induced asthma, and an
 CC infectious disease. CIC is also useful for increasing IFN-gamma; or IFN-
 CC alpha; in an individual, where the individual has idiopathic pulmonary
 CC fibrosis, or a viral infection. CIC's are useful for ameliorating a
 CC symptom of an infectious disease, or an immunoglobulin E (IGE)-related
 CC disorder in an individual, where the IGE-related disorder is allergy, or
 CC an allergy-related disorder. CIC's are also useful for treating cancer
 CC and can be used for stimulating cellular immune system cells production
 CC in an individual. This polynucleotide sequence represents a DNA sequence
 CC which is a nucleic acid moiety part of a chimeric immunomodulatory compound
 CC of the invention.

XX Sequence 10 BP; 1 A; 3 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 9; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 :|||:|
 Db 2 TACCGTTCG 10

RESULT 33

ADB88802
 ID ADB88802 standard; DNA; 10 BP.

AC ADB88802;

DT 04-DEC-2003 (first entry)

DE Chimeric immunomodulatory compound DNA sequence, SEQ ID No 5.

XX Chimeric immunomodulatory compound; CIC; immunomodulatory activity;
 KW spacer moiety; linear hexaethylene glycol structure; HEG; immune;
 KW Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma;
 KW IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating;
 KW immunoglobulin E; IGE; allergy; cancer;
 KW stimulating cellular immune system cell; ss.

XX Synthetic.

XX WO200300922-A2.

XX 03-JAN-2003.

XX 21-JUN-2002; 2002WO-US020025.

XX 21-JUN-2001; 2001US-0299883P.

XX 23-APR-2002; 2002US-0375253P.

XX (DYNA-) DYNAX TECHNOLOGIES CORP.

XX Fearon KL, Dina D, Tuck SF;

XX WPI; 2003-210159/20.

XX Novel chimeric immunomodulatory compound having immunomodulatory
 PT activity, useful for modulating an immune response and for treating
 PT cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.

XX

PS Disclosure; Page 32; 224pp; English.

XX The invention relates to a novel chimeric immunomodulatory compound (CIC)
 CC having immunomodulatory activity, comprising two or more nucleic acid
 CC moieties and one or more non-nucleic acid spacer moieties, where at least
 CC one non-nucleic acid spacer moiety is covalently joined to two nucleic
 CC acid moieties, where the spacer is not a polypeptide, and at least one
 CC nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric
 CC immunomodulatory compounds more specifically contain the nucleic acid
 CC spacer moieties of linear hexaethylene glycol structure (HEG) subunits.
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 CC immune response which is an allergy or allergy-induced asthma, and an
 CC infectious disease. CIC is also useful for increasing IFN-gamma; or IFN-
 CC alpha; in an individual, where the individual has idiopathic pulmonary
 CC fibrosis, or a viral infection. CIC's are useful for ameliorating a
 CC symptom of an infectious disease, or an immunoglobulin E (IGE)-related
 CC disorder in an individual, where the IGE-related disorder is allergy, or
 CC an allergy-related disorder. CIC's are also useful for treating cancer
 CC and can be used for stimulating cellular immune system cells production
 CC in an individual. This polynucleotide sequence represents a DNA sequence
 CC which is a nucleic acid moiety part of a chimeric immunomodulatory compound
 CC of the invention.

XX Sequence 10 BP; 2 A; 2 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 9; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 :|||:|
 Db 2 GAACGTTTCG 10

RESULT 34

ADB88819
 ID ADB88819 standard; DNA; 10 BP.

AC ADB88819;

DT 04-DEC-2003 (first entry)

DE Chimeric immunomodulatory compound DNA sequence, SEQ ID No 22.

XX Chimeric immunomodulatory compound; CIC; immunomodulatory activity;
 KW spacer moiety; linear hexaethylene glycol structure; HEG; immune;
 KW Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma;
 KW IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating;
 KW immunoglobulin E; IGE; allergy; cancer;
 KW stimulating cellular immune system cell; ss.

XX Synthetic.

XX WO200300922-A2.

XX 03-JAN-2003.

XX 21-JUN-2002; 2002WO-US020025.

XX 21-JUN-2001; 2001US-0299883P.

XX 23-APR-2002; 2002US-0375253P.

XX (DYNA-) DYNAX TECHNOLOGIES CORP.

XX Fearon KL, Dina D, Tuck SF;

XX WPI; 2003-210159/20.

XX Novel chimeric immunomodulatory compound having immunomodulatory
 PT activity, useful for modulating an immune response and for treating
 PT cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.

XX

PS Disclosure; Page 33; 224pp; English.

XX The invention relates to a novel chimeric immunomodulatory compound (CIC) having immunomodulatory activity, comprising two or more nucleic acid moieties and one or more non-nucleic acid spacer moieties, where at least one non-nucleic acid spacer moiety is covalently joined to two nucleic acid moieties, where the spacer is not a polypeptide, and at least one nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric immunomodulatory compounds more specifically contain the nucleic acid spacer moieties of linear hexaethylene glycol structure (HEG) subunits. CIC's are useful for modulating an immune response in an individual, where the individual suffers from a disorder associated with a Th2-type immune response which is an allergy or allergy-induced asthma, and an infectious disease. CIC is also useful for increasing IFN-gamma, or IFN-alpha, in an individual, where the individual has idiopathic pulmonary fibrosis, or a viral infection. CIC's are useful for ameliorating a symptom of an infectious disease, or an immunoglobulin E (IgE)-related disorder in an individual, where the IgE-related disorder is allergy, or an allergy-related disorder. CIC's are also useful for treating cancer and can be used for stimulating cellular immune system cells production in an individual. This polynucleotide sequence represents a DNA sequence which is a nucleic acid moiety part of a chimeric immunomodulatory compound of the invention.

XX Sequence 10 BP; 2 A; 2 C; 2 G; 4 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 9; Length 10;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGKTCCG 10
: |||: |||
Db 2 TAACGTTCCG 10

RESULT 35

ADB88806
ID ADB88806 standard; DNA; 10 BP.

XX ADB88806;

DT 04-DEC-2003 (first entry)

XX Chimeric immunomodulatory compound DNA sequence, SEQ ID No 9.

XX chimeric immunomodulatory compound; CIC; immunomodulatory activity; spacer moiety; linear hexaethylene glycol structure; HEG; immune; Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma; IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating; immunoglobulin E; IgE; allergy; cancer; stimulating cellular immune system cell; ss.

XX Synthetic.

XX WO2003000922-A2.

XX 03-JAN-2003.

XX 21-JUN-2002; 2002WO-US020025.

XX 21-JUN-2001; 2001US-0299883P.

XX 23-APR-2002; 2002US-0375253P.

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XX Fearon KL, Dina D, Tuck SF;

XX WPI; 2003-210159/20.

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XX Sequence 10 BP; 1 A; 2 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 9; Length 10;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGKTCCG 10
: |||: |||
Db 2 GATCGGTCCG 10

RESULT 36

ADB88814
ID ADB88814 standard; DNA; 10 BP.

XX ADB88814;

DT 04-DEC-2003 (first entry)

XX Chimeric immunomodulatory compound DNA sequence, SEQ ID No 17.

XX chimeric immunomodulatory compound; CIC; immunomodulatory activity; spacer moiety; linear hexaethylene glycol structure; HEG; immune; Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma; IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating; immunoglobulin E; IgE; allergy; cancer; stimulating cellular immune system cell; ss.

XX Synthetic.

XX WO2003000922-A2.

XX 03-JAN-2003.

XX 21-JUN-2002; 2002WO-US020025.

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XX Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;

XX Query Match 68.0%; Score 6.8; DB 9; Length 10;

XX Best Local Similarity 66.7%; Pred. No. 2e+05; Mismatches 2; Indels 0; Gaps 0;

XX Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

DB 2 GAACGTCG 10

RESULT 37

ADB88814/C

ID ADB88814 standard; DNA; 10 BP.

AC ADB88814;

DT 04-DEC-2003 (first entry)

XX Chimeric immunomodulatory compound DNA sequence, SEQ ID No 17.

XX Chimeric immunomodulatory compound; CIC; immunomodulatory activity; spacer moiety; linear hexaethylene glycol structure; HEG; immune; Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma; IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating; immunoglobulin E; IgE; allergy; cancer; stimulating cellular immune system cell; ss.

XX Synthetic.

XX WO2003000922-A2.

XX 03-JAN-2003.

XX 21-JUN-2002; 2002WO-US020025.

XX 21-JUN-2001; 2001US-0299883P.

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XX Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;

XX Query Match 68.0%; Score 6.8; DB 9; Length 10;

XX Best Local Similarity 66.7%; Pred. No. 2e+05; Mismatches 2; Indels 0; Gaps 0;

XX Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

DB 2 GAACGTCG 10

RESULT 38

ADB88803

ID ADB88803 standard; DNA; 10 BP.

AC ADB88803;

DT 04-DEC-2003 (first entry)

XX Chimeric immunomodulatory compound DNA sequence, SEQ ID No 6.

XX Chimeric immunomodulatory compound; CIC; immunomodulatory activity; spacer moiety; linear hexaethylene glycol structure; HEG; immune; Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma; IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating; immunoglobulin E; IgE; allergy; cancer; stimulating cellular immune system cell; ss.

XX Synthetic.

XX WO2003000922-A2.

XX 03-JAN-2003.

XX 21-JUN-2002; 2002WO-US020025.

XX 21-JUN-2001; 2001US-0299883P.

XX 23-APR-2002; 2002US-0375253P.

XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX Fearon KL, Dina D, Tuck SF; WPI; 2003-210159/20.

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PS Disclosure; Page 32; 224pp; English.
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 CC acid moieties, where the spacer is not a polypeptide, and at least one
 CC nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric
 CC immunomodulatory compounds more specifically contain the nucleic acid
 CC spacer moieties of linear hexaethylene glycol structure (HEG) subunits.
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 CC where the individual suffers from a disorder associated with a Th2-type
 CC immune response which is an allergy or allergy-induced asthma, and an
 CC infectious disease. CIC is also useful for increasing IFN-gamma, or IFN-
 CC alpha; in an individual, where the individual has idiopathic pulmonary
 CC fibrosis, or a viral infection. CIC's are useful for ameliorating a
 CC symptom of an infectious disease, or an immunoglobulin E (IgE)-related
 CC disorder in an individual, where the IgE-related disorder is allergy, or
 CC an allergy-related disorder. CIC's are also useful for treating cancer
 CC and can be used for stimulating cellular immune system cells production
 CC in an individual. This polynucleotide sequence represents a DNA sequence
 CC which is a nucleic acid moiety part of a chimeric immunomodulatory compound
 CC of the invention.
 XX
 SQ Sequence 10 BP; 2 A; 2 C; 4 G; 2 T; 0 U; 0 Other;
 Query Match 68.0%; Score 6.8; DB 9; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANCGKTCG 10
 : |||:
 Db 2 GAACGTTGC 10
 RESULT 39
 ADB88808
 ID ADB88808 standard; DNA; 10 BP.
 XX
 AC ADB88808;
 XX
 DT 04-DEC-2003 (first entry)
 XX
 DE Chimeric immunomodulatory compound DNA sequence, SEQ ID No 11.
 XX
 KW chimeric immunomodulatory compound; CIC; immunomodulatory activity;
 KW spacer moiety; linear hexaethylene glycol structure; HEG; immune;
 KW Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma;
 KW IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating;
 KW immunoglobulin E; IgE; allergy; cancer;
 KW stimulating cellular immune system cell; ss.
 XX
 OS Synthetic.
 XX
 XX WO2003000922-A2.
 XX
 XX 03-JAN-2003.
 XX
 PF 21-JUN-2002; 2002WO-US020025.
 XX
 XX 21-JUN-2001; 2001US-0299883P.
 PR
 PR 23-APR-2002; 2002US-0375253P.
 XX
 XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 XX
 XX Fearon KL, Dina D, Tuck SF;
 PI
 XX WPI; 2003-210159/20.
 DR
 XX
 XX Novel chimeric immunomodulatory compound having immunomodulatory
 PT activity, useful for modulating an immune response and for treating
 PT cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.
 XX

PS Disclosure; Page 32; 224pp; English.
 XX
 CC The invention relates to a novel chimeric immunomodulatory compound (CIC)
 CC having immunomodulatory activity, comprising two or more nucleic acid
 CC moieties and one or more non-nucleic acid spacer moieties, where at least
 CC one non-nucleic acid spacer moiety is covalently joined to two nucleic
 CC acid moieties, where the spacer is not a polypeptide, and at least one
 CC nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric
 CC immunomodulatory compounds more specifically contain the nucleic acid
 CC spacer moieties of linear hexaethylene glycol structure (HEG) subunits.
 CC CIC's are useful for modulating an immune response in an individual,
 CC where the individual suffers from a disorder associated with a Th2-type
 CC immune response which is an allergy or allergy-induced asthma, and an
 CC infectious disease. CIC is also useful for increasing IFN-gamma, or IFN-
 CC alpha; in an individual, where the individual has idiopathic pulmonary
 CC fibrosis, or a viral infection. CIC's are useful for ameliorating a
 CC symptom of an infectious disease, or an immunoglobulin E (IgE)-related
 CC disorder in an individual, where the IgE-related disorder is allergy, or
 CC an allergy-related disorder. CIC's are also useful for treating cancer
 CC and can be used for stimulating cellular immune system cells production
 CC in an individual. This polynucleotide sequence represents a DNA sequence
 CC which is a nucleic acid moiety part of a chimeric immunomodulatory compound
 CC of the invention.
 XX
 SQ Sequence 10 BP; 2 A; 2 C; 4 G; 2 T; 0 U; 0 Other;
 Query Match 68.0%; Score 6.8; DB 9; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANCGKTCG 10
 : |||:
 Db 2 GAACGTTGC 10
 RESULT 40
 ADB88810
 ID ADB88810 standard; DNA; 10 BP.
 XX
 AC ADB88810;
 XX
 DT 04-DEC-2003 (first entry)
 XX
 DE Chimeric immunomodulatory compound DNA sequence, SEQ ID No 13.
 XX
 KW chimeric immunomodulatory compound; CIC; immunomodulatory activity;
 KW spacer moiety; linear hexaethylene glycol structure; HEG; immune;
 KW Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma;
 KW IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating;
 KW immunoglobulin E; IgE; allergy; cancer;
 KW stimulating cellular immune system cell; ss.
 XX
 OS Synthetic.
 XX
 XX WO2003000922-A2.
 XX
 XX 03-JAN-2003.
 XX
 PF 21-JUN-2002; 2002WO-US020025.
 XX
 XX 21-JUN-2001; 2001US-0299883P.
 PR
 PR 23-APR-2002; 2002US-0375253P.
 XX
 XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 XX
 XX Fearon KL, Dina D, Tuck SF;
 PI
 XX WPI; 2003-210159/20.
 DR
 XX
 XX Novel chimeric immunomodulatory compound having immunomodulatory
 PT activity, useful for modulating an immune response and for treating
 PT cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.
 XX

PS Disclosure; Page 32; 224pp; English.

XX The invention relates to a novel chimeric immunomodulatory compound (CIC)
 CC having immunomodulatory activity, comprising two or more nucleic acid
 CC moieties and one or more non-nucleic acid spacer moieties, where at least
 CC one non-nucleic acid spacer moiety is covalently joined to two nucleic
 CC acid moieties, where the spacer is not a polypeptide, and at least one
 CC nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric
 CC immunomodulatory compounds more specifically contain the nucleic acid
 CC spacer moieties of linear hexaethylene glycol structure (HEG) subunits.
 CC CIC's are useful for modulating an immune response in an individual,
 CC where the individual suffers from a disorder associated with a Th2-type
 CC immune response which is an allergy or allergy-induced asthma, and an
 CC infectious disease. CIC is also useful for increasing IFN-gamma; or IFN-
 CC alpha; in an individual, where the individual has idiopathic pulmonary
 CC fibrosis, or a viral infection. CIC's are useful for ameliorating a
 CC symptom of an infectious disease, or an immunoglobulin E (IgE)-related
 CC disorder in an individual, where the IgE-related disorder is allergy, or
 CC an allergy-related disorder. CIC's are also useful for treating cancer
 CC and can be used for stimulating cellular immune system cells production
 CC in an individual. This polynucleotide sequence represents a DNA sequence
 CC which is a nucleic acid moiety part of a chimeric immunomodulatory compound
 CC of the invention.

XX Sequence 10 BP; 1 A; 2 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 9; Length 10;

Best Local Similarity 66.7%; Pred. No. 2e+05;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

OY 2 DANCGKTCG 10

DB 2 TATCGTCG 10

RESULT 41

ADB88809

ID ADB88809 standard; DNA; 10 BP.

XX ADB88809;

XX 04-DEC-2003 (first entry)

XX Chimeric immunomodulatory compound DNA sequence, SEQ ID No 12.

XX Chimeric immunomodulatory compound; CIC; immunomodulatory activity;

XX spacer moiety; linear hexaethylene glycol structure; HEG; immune;

XX Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma;

XX IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating;

XX immunoglobulin E; IgE; allergy; cancer;

XX stimulating cellular immune system cell; ss.

XX Synthetic.

XX WO200300922-A2.

XX 03-JAN-2003.

XX 21-JUN-2002; 2002WO-US020025.

XX 21-JUN-2001; 2001US-0299883P.

XX 23-APR-2002; 2002US-0375253P.

XX (DYNA-) DYNAXVAX TECHNOLOGIES CORP.

XX Fearon KL, Dina D, Tuck SF;

XX WPI; 2003-210159/20.

XX Novel chimeric immunomodulatory compound having immunomodulatory

PT activity, useful for modulating an immune response and for treating

PT cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.

XX

PS Disclosure; Page 32; 224pp; English.

XX The invention relates to a novel chimeric immunomodulatory compound (CIC)
 CC having immunomodulatory activity, comprising two or more nucleic acid
 CC moieties and one or more non-nucleic acid spacer moieties, where at least
 CC one non-nucleic acid spacer moiety is covalently joined to two nucleic
 CC acid moieties, where the spacer is not a polypeptide, and at least one
 CC nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric
 CC immunomodulatory compounds more specifically contain the nucleic acid
 CC spacer moieties of linear hexaethylene glycol structure (HEG) subunits.
 CC CIC's are useful for modulating an immune response in an individual,
 CC where the individual suffers from a disorder associated with a Th2-type
 CC immune response which is an allergy or allergy-induced asthma, and an
 CC infectious disease. CIC is also useful for increasing IFN-gamma; or IFN-
 CC alpha; in an individual, where the individual has idiopathic pulmonary
 CC fibrosis, or a viral infection. CIC's are useful for ameliorating a
 CC symptom of an infectious disease, or an immunoglobulin E (IgE)-related
 CC disorder in an individual, where the IgE-related disorder is allergy, or
 CC an allergy-related disorder. CIC's are also useful for treating cancer
 CC and can be used for stimulating cellular immune system cells production
 CC in an individual. This polynucleotide sequence represents a DNA sequence
 CC which is a nucleic acid moiety part of a chimeric immunomodulatory compound
 CC of the invention.

XX Sequence 10 BP; 2 A; 2 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 9; Length 10;

Best Local Similarity 66.7%; Pred. No. 2e+05;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

OY 2 DANCGKTCG 10

DB 2 TATCGTCG 10

RESULT 42

ADB88812

ID ADB88812 standard; DNA; 10 BP.

XX ADB88812;

XX 04-DEC-2003 (first entry)

XX Chimeric immunomodulatory compound DNA sequence, SEQ ID No 15.

XX Chimeric immunomodulatory compound; CIC; immunomodulatory activity;

XX spacer moiety; linear hexaethylene glycol structure; HEG; immune;

XX Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma;

XX IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating;

XX immunoglobulin E; IgE; allergy; cancer;

XX stimulating cellular immune system cell; ss.

XX Synthetic.

XX WO200300922-A2.

XX 03-JAN-2003.

XX 21-JUN-2002; 2002WO-US020025.

XX 21-JUN-2001; 2001US-0299883P.

XX 23-APR-2002; 2002US-0375253P.

XX (DYNA-) DYNAXVAX TECHNOLOGIES CORP.

XX Fearon KL, Dina D, Tuck SF;

XX WPI; 2003-210159/20.

XX Novel chimeric immunomodulatory compound having immunomodulatory

PT activity, useful for modulating an immune response and for treating

PT cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.

XX

PS Disclosure; Page 33; 224pp; English.

XX The invention relates to a novel chimeric immunomodulatory compound (CIC) having immunomodulatory activity, comprising two or more nucleic acid moieties and one or more non-nucleic acid spacer moieties, where at least one non-nucleic acid spacer moiety is covalently joined to two nucleic acid moieties, where the spacer is not a polypeptide, and at least one nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric immunomodulatory compounds more specifically contain the nucleic acid spacer moieties of linear hexaethylene glycol structure (HEG) subunits. CIC's are useful for modulating an immune response in an individual, where the individual suffers from a disorder associated with a Th2-type immune response which is an allergy or allergy-induced asthma, and an infectious disease. CIC is also useful for increasing IFN-gamma, or IFN-alpha; in an individual, where the individual has idiopathic pulmonary fibrosis, or a viral infection. CIC's are useful for ameliorating a symptom of an infectious disease, or an immunoglobulin E (IgE)-related disorder in an individual, where the IgE-related disorder is allergy, or an allergy-related disorder. CIC's are also useful for treating cancer and can be used for stimulating cellular immune system cells production in an individual. This polynucleotide sequence represents a DNA sequence which is a nucleic acid moiety part of a chimeric immunomodulatory compound of the invention.

SQ Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 9; Length 10;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGETCG 10
: |||:
DB 2 AACCGTTCG 10

RESULT 43

AD888817
ID ADB88817 standard; DNA; 10 BP.

AC ADB88817;

DT 04-DEC-2003 (first entry)

XX Chimeric immunomodulatory compound DNA sequence, SEQ ID NO 20.

XX Chimeric immunomodulatory compound; CIC; immunomodulatory activity; spacer moiety; linear hexaethylene glycol structure; HEG; immune; Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma; IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating; immunoglobulin E; IgE; allergy; cancer; stimulating cellular immune system cell; ss.

XX Synthetic.

XX WO2003000922-A2.

PN 03-JAN-2003.

XX 21-JUN-2002; 2002WO-US020025.

XX 21-JUN-2001; 2001US-0299883P.

PR 23-APR-2002; 2002US-0375253P.

XX (DYNA-) DYNAX TECHNOLOGIES CORP.

PI Fearon KL, Dina D, Tuck SF;

XX WPI; 2003-210159/20.

XX Novel chimeric immunomodulatory compound having immunomodulatory

PT activity, useful for modulating an immune response and for treating

XX cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.

PS Disclosure; Page 33; 224pp; English.

XX The invention relates to a novel chimeric immunomodulatory compound (CIC) having immunomodulatory activity, comprising two or more nucleic acid moieties and one or more non-nucleic acid spacer moieties, where at least one non-nucleic acid spacer moiety is covalently joined to two nucleic acid moieties, where the spacer is not a polypeptide, and at least one nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric immunomodulatory compounds more specifically contain the nucleic acid spacer moieties of linear hexaethylene glycol structure (HEG) subunits. CIC's are useful for modulating an immune response in an individual, where the individual suffers from a disorder associated with a Th2-type immune response which is an allergy or allergy-induced asthma, and an infectious disease. CIC is also useful for increasing IFN-gamma, or IFN-alpha; in an individual, where the individual has idiopathic pulmonary fibrosis, or a viral infection. CIC's are useful for ameliorating a symptom of an infectious disease, or an immunoglobulin E (IgE)-related disorder in an individual, where the IgE-related disorder is allergy, or an allergy-related disorder. CIC's are also useful for treating cancer and can be used for stimulating cellular immune system cells production in an individual. This polynucleotide sequence represents a DNA sequence which is a nucleic acid moiety part of a chimeric immunomodulatory compound of the invention.

SQ Sequence 10 BP; 2 A; 2 C; 2 G; 3 T; 1 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 9; Length 10;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGETCG 10
: |||:
DB 2 TAACGUTCG 10

RESULT 44

ADK67593

ID ADK67593 standard; DNA; 10 BP.

AC ADK67593;

DT 06-MAY-2004 (first entry)

XX Immunostimulant oligonucleotide used in immunomodulatory composition.

XX Immunomodulator; immunostimulant; vaccine; ss.

XX Synthetic.

XX WO2004014322-A2.

XX 19-FEB-2004.

XX 12-AUG-2003; 2003WO-US025415.

XX 12-AUG-2002; 2002US-0402968P.

XX (DYNA-) DYNAX TECHNOLOGIES CORP.

XX Van Nest G, Tuck S;

XX WPI; 2004-238627/22.

XX Immunomodulatory composition useful for modulating immune responses in individuals, comprises immunomodulatory particles or a particulate composition made by mixing cationic condensing agent and an immunomodulatory compound.

PS Disclosure; SEQ ID NO 23; 90pp; English.

XX The present sequence is that of an immunomodulatory compound (IMC) that can be used in novel immunomodulatory compositions of the invention. The IMC may contain modifications of the 3'OH or 5'OH group, the nucleotide

CC base, the sugar component and phosphate group. Novel immunomodulatory
 CC compositions of the invention comprise a cationic condensing agent, an
 CC IMC comprising the nucleotide sequence 5'-CG-3', and a stabilising agent.
 CC The compositions form particles which have increased immunomodulatory
 CC activity as compared to IMCs not formulated in the compositions of the
 CC invention. The immunomodulatory compositions can be used for
 CC immunomodulation of an individual, e.g. when the individual suffers from
 CC a disorder associated with a Th2-type immune response (e.g. allergies or
 CC allergy-induced asthma), is receiving vaccines such as therapeutic
 CC vaccines (e.g. vaccines comprising an allergy epitope, a mycobacterial
 CC epitope or a tumour associated epitope) or prophylactic vaccines, suffers
 CC from cancer, suffers from an infectious disease or is at risk of exposure
 CC to an infectious agent.

SQ Sequence 10 BP; 2 A; 2 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 :|||:||||
 Db 2 GAACGTCG 10

RESULT 45
 ADK67582
 ID ADK67582 standard; DNA; 10 BP.
 XX
 AC ADK67582;
 XX
 DT 06-MAY-2004 (first entry)
 XX
 DE Immunostimulant oligonucleotide used in immunomodulatory composition.
 XX
 KW Immunomodulator; immunostimulant; vaccine; ss.
 XX
 OS Synthetic.

WO2004014322-A2.
 19-FEB-2004.
 12-AUG-2003; 2003WO-US025415.
 12-AUG-2002; 2002US-0402968P.
 (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 Van Nest G, Tuck S;
 WPI; 2004-238627/22.

Immunomodulatory composition useful for modulating immune responses in
 individuals, comprises immunomodulatory particles or a particulate
 composition made by mixing cationic condensing agent and an
 immunomodulatory compound.

Disclosure; SEQ ID NO 12; 90pp; English.

The present sequence is that of an immunomodulatory compound (IMC) that
 can be used in novel immunomodulatory compositions of the invention. The
 IMC may contain modifications of the 3'OH or 5'OH group, the nucleotide
 base, the sugar component and phosphate group. Novel immunomodulatory
 compositions of the invention comprise a cationic condensing agent, an
 IMC comprising the nucleotide sequence 5'-CG-3', and a stabilising agent.
 The compositions form particles which have increased immunomodulatory
 activity as compared to IMCs not formulated in the compositions of the
 invention. The immunomodulatory compositions can be used for
 immunomodulation of an individual, e.g. when the individual suffers from
 a disorder associated with a Th2-type immune response (e.g. allergies or
 allergy-induced asthma), is receiving vaccines such as therapeutic
 vaccines (e.g. vaccines comprising an allergy epitope, a mycobacterial

CC epitope or a tumour associated epitope) or prophylactic vaccines, suffers
 CC from cancer, suffers from an infectious disease or is at risk of exposure
 CC to an infectious agent.

SQ Sequence 10 BP; 2 A; 2 C; 3 G; 2 T; 1 U; 0 Other;
 Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 :|||:||||
 Db 2 GAACGTCG 10

RESULT 46
 ADK67580
 ID ADK67580 standard; DNA; 10 BP.
 XX
 AC ADK67580;
 XX
 DT 06-MAY-2004 (first entry)
 XX
 DE Immunostimulant oligonucleotide used in immunomodulatory composition.
 XX
 KW Immunomodulator; immunostimulant; vaccine; DNA-RNA hybrid; ss.
 XX
 OS Synthetic.

Key Location/Qualifiers
 modified_base 1
 FT /tag= a
 FT /mod_base= OTHER
 FT /note= "OTHER= 5-bromocytosine"
 modified_base 5
 FT /tag= b
 FT /mod_base= OTHER
 FT /note= "OTHER= 5-bromocytosine"

WO2004014322-A2.

19-FEB-2004.

12-AUG-2003; 2003WO-US025415.

12-AUG-2002; 2002US-0402968P.

(DYNA-) DYNAVAX TECHNOLOGIES CORP.

Van Nest G, Tuck S;

WPI; 2004-238627/22.

Immunomodulatory composition useful for modulating immune responses in
 individuals, comprises immunomodulatory particles or a particulate
 composition made by mixing cationic condensing agent and an
 immunomodulatory compound.

Disclosure; SEQ ID NO 10; 90pp; English.

The present sequence is that of an immunomodulatory compound (IMC) that
 can be used in novel immunomodulatory compositions of the invention. The
 IMC may contain modifications of the 3'OH or 5'OH group, the nucleotide
 base, the sugar component and phosphate group. Novel immunomodulatory
 compositions of the invention comprise a cationic condensing agent, an
 IMC comprising the nucleotide sequence 5'-CG-3', and a stabilising agent.
 The compositions form particles which have increased immunomodulatory
 activity as compared to IMCs not formulated in the compositions of the
 invention. The immunomodulatory compositions can be used for
 immunomodulation of an individual, e.g. when the individual suffers from
 a disorder associated with a Th2-type immune response (e.g. allergies or
 allergy-induced asthma), is receiving vaccines such as therapeutic
 vaccines (e.g. vaccines comprising an allergy epitope, a mycobacterial

CC epitope or a tumour associated epitope) or prophylactic vaccines, suffers
CC from cancer, suffers from an infectious disease or is at risk of exposure
CC to an infectious agent.

XX
SQ Sequence 10 BP; 2 A; 3 C; 3 G; 1 T; 1 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
:|:|:|:|
Db 2 GAACGTCG 10

RESULT 47

ADK67580/c
ID ADK67580 standard; DNA; 10 BP.

XX
AC ADK67580;

XX
DT 06-MAY-2004 (first entry)

XX
DE Immunostimulant oligonucleotide used in immunomodulatory composition.

XX
KW Immunomodulator; immunostimulant; vaccine; DNA-RNA hybrid; ss.

XX
OS Synthetic.

XX
FH Key Location/Qualifiers
modified_base 1

FT /*tag= a

FT /mod_base= OTHER

FT /note= "OTHER= 5-bromocytosine"

FT modified_base 5

FT /*tag= b

FT /mod_base= OTHER

FT /note= "OTHER= 5-bromocytosine"

XX
WO2004014322-A2.

XX
PD 19-FEB-2004.

XX
PF 12-AUG-2003; 2003WO-US025415.

XX
PR 12-AUG-2002; 2002US-0402968P.

XX
PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX
PI Van Nest G, Tuck S;

XX
DR WPI; 2004-238627/22.

XX
PT Immunomodulatory composition useful for modulating immune responses in
PT individuals, comprises immunomodulatory particles or a particulate
PT composition made by mixing cationic condensing agent and an
PT immunomodulatory compound.

XX
PS Disclosure; SEQ ID NO 10; 90pp; English.

XX
CC The present sequence is that of an immunomodulatory compound (IMC) that
CC can be used in novel immunomodulatory compositions of the invention. The
CC IMC may contain modifications of the 3'OH or 5'OH group, the nucleotide
CC base, the sugar component and phosphate group. Novel immunomodulatory
CC compositions of the invention comprise a cationic condensing agent, an
CC IMC comprising the nucleotide sequence 5'-CG-3', and a stabilising agent.
CC The compositions form particles which have increased immunomodulatory
CC activity as compared to IMCs not formulated in the compositions of the
CC invention. The immunomodulatory compositions can be used for
CC immunomodulation of an individual, e.g. when the individual suffers from
CC a disorder associated with a Th2-type immune response (e.g. allergies or
CC allergy-induced asthma), is receiving vaccines such as therapeutic
CC vaccines (e.g. vaccines comprising an allergy epitope, a mycobacterial

CC epitope or a tumour associated epitope) or prophylactic vaccines, suffers
CC from cancer, suffers from an infectious disease or is at risk of exposure
CC to an infectious agent.

XX
SQ Sequence 10 BP; 2 A; 3 C; 3 G; 1 T; 1 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
:|:|:|:|
Db 9 GAACGTCG 1

RESULT 48

ADK67584
ID ADK67584 standard; DNA; 10 BP.

XX
AC ADK67584;

XX
DT 06-MAY-2004 (first entry)

XX
DE Immunostimulant oligonucleotide used in immunomodulatory composition.

XX
KW Immunomodulator; immunostimulant; vaccine; ss.

XX
OS Synthetic.

XX
PN WO2004014322-A2.

XX
PD 19-FEB-2004.

XX
PF 12-AUG-2003; 2003WO-US025415.

XX
PR 12-AUG-2002; 2002US-0402968P.

XX
PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX
PI Van Nest G, Tuck S;

XX
DR WPI; 2004-238627/22.

XX
PT Immunomodulatory composition useful for modulating immune responses in
PT individuals, comprises immunomodulatory particles or a particulate
PT composition made by mixing cationic condensing agent and an
PT immunomodulatory compound.

XX
PS Disclosure; SEQ ID NO 14; 90pp; English.

XX
CC The present sequence is that of an immunomodulatory compound (IMC) that
CC can be used in novel immunomodulatory compositions of the invention. The
CC IMC may contain modifications of the 3'OH or 5'OH group, the nucleotide
CC base, the sugar component and phosphate group. Novel immunomodulatory
CC compositions of the invention comprise a cationic condensing agent, an
CC IMC comprising the nucleotide sequence 5'-CG-3', and a stabilising agent.
CC The compositions form particles which have increased immunomodulatory
CC activity as compared to IMCs not formulated in the compositions of the
CC invention. The immunomodulatory compositions can be used for
CC immunomodulation of an individual, e.g. when the individual suffers from
CC a disorder associated with a Th2-type immune response (e.g. allergies or
CC allergy-induced asthma), is receiving vaccines such as therapeutic
CC vaccines (e.g. vaccines comprising an allergy epitope, a mycobacterial
CC epitope or a tumour associated epitope) or prophylactic vaccines, suffers
CC from cancer, suffers from an infectious disease or is at risk of exposure
CC to an infectious agent.

XX
SQ Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGRKTCG 10
 : ||: |||
 Db 2 GAACGTCG 10

RESULT 49

ADK67584/c
 ID ADK67584 standard; DNA, 10 BP.

XX AC ADK67584;

XX 06-MAY-2004 (first entry)

XX Immunostimulant oligonucleotide used in immunomodulatory composition.

XX Immunomodulator; immunostimulant; vaccine; ss.

XX Synthetic.

XX WO2004014322-A2.

XX 19-FEB-2004.

XX 12-AUG-2003; 2003WO-US025415.

XX 12-AUG-2002; 2002US-0402968P.

XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX Van Nest G, Tuck S;

XX WPI; 2004-238627/22.

XX Immunomodulatory composition useful for modulating immune responses in individuals, comprises immunomodulatory particles or a particulate composition made by mixing cationic condensing agent and an immunomodulatory compound.

XX Disclosure; SEQ ID NO 14; 90pp; English.

XX The present sequence is that of an immunomodulatory compound (IMC) that can be used in novel immunomodulatory compositions of the invention. The IMC may contain modifications of the 3'OH or 5'OH group, the nucleotide base, the sugar component and phosphate group. Novel immunomodulatory compositions of the invention comprise a cationic condensing agent, an IMC comprising the nucleotide sequence 5'-CG-3', and a stabilising agent. The compositions form particles which have increased immunomodulatory activity as compared to IMCs not formulated in the compositions of the invention. The immunomodulatory compositions can be used for immunomodulation of an individual, e.g. when the individual suffers from a disorder associated with a Th2-type immune response (e.g. allergies or allergy-induced asthma), is receiving vaccines such as therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a mycobacterial epitope or a tumour associated epitope) or prophylactic vaccines, suffers from cancer, suffers from an infectious disease or is at risk of exposure to an infectious agent.

XX Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGRKTCG 10
 : ||: |||
 Db 9 GAACGTCG 1

RESULT 50

ADK67579
 ID ADK67579 standard; DNA, 10 BP.

XX AC ADK67579;

XX 06-MAY-2004 (first entry)
 XX Immunostimulant oligonucleotide used in immunomodulatory composition.
 XX Immunomodulator; immunostimulant; vaccine; DNA-RNA hybrid; ss.
 XX Synthetic.
 XX Key Location/Qualifiers
 modified_base 5 /*tag= a
 FT /mod_base= OTHER
 FT /note= "OTHER= 5-bromocytosine"
 XX WO2004014322-A2.

XX 19-FEB-2004.

XX 12-AUG-2003; 2003WO-US025415.

XX 12-AUG-2002; 2002US-0402968P.

XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX Van Nest G, Tuck S;

XX WPI; 2004-238627/22.

XX Immunomodulatory composition useful for modulating immune responses in individuals, comprises immunomodulatory particles or a particulate composition made by mixing cationic condensing agent and an immunomodulatory compound.

XX Disclosure; SEQ ID NO 9; 90pp; English.

XX The present sequence is that of an immunomodulatory compound (IMC) that can be used in novel immunomodulatory compositions of the invention. The IMC may contain modifications of the 3'OH or 5'OH group, the nucleotide base, the sugar component and phosphate group. Novel immunomodulatory compositions of the invention comprise a cationic condensing agent, an IMC comprising the nucleotide sequence 5'-CG-3', and a stabilising agent. The compositions form particles which have increased immunomodulatory activity as compared to IMCs not formulated in the compositions of the invention. The immunomodulatory compositions can be used for immunomodulation of an individual, e.g. when the individual suffers from a disorder associated with a Th2-type immune response (e.g. allergies or allergy-induced asthma), is receiving vaccines such as therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a mycobacterial epitope or a tumour associated epitope) or prophylactic vaccines, suffers from cancer, suffers from an infectious disease or is at risk of exposure to an infectious agent.

XX Sequence 10 BP; 3 A; 2 C; 3 G; 1 T; 1 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGRKTCG 10
 : ||: |||
 Db 2 AAACGTCG 10

RESULT 51

ADK67592
 ID ADK67592 standard; DNA, 10 BP.

XX AC ADK67592;

XX 06-MAY-2004 (first entry)

XX Immunostimulant oligonucleotide used in immunomodulatory composition.

XX Immunomodulator; immunostimulant; vaccine; ss.
XX Synthetic.
XX WO2004014322-A2.
XX 19-FEB-2004.
XX 12-AUG-2003; 2003WO-US025415.
XX 12-AUG-2002; 2002US-0402968P.
XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
XX Van Nest G, Tuck S;
XX WPI; 2004-238627/22.
XX Immunomodulatory composition useful for modulating immune responses in individuals, comprises immunomodulatory particles or a particulate composition made by mixing cationic condensing agent and an immunomodulatory compound.
XX Disclosure; SEQ ID NO 22; 90pp; English.
XX The present sequence is that of an immunomodulatory compound (IMC) that can be used in novel immunomodulatory compositions of the invention. The IMC may contain modifications of the 3'OH or 5'OH group, the nucleotide base, the sugar component and phosphate group. Novel immunomodulatory compositions of the invention comprise a cationic condensing agent, an IMC comprising the nucleotide sequence 5'-CG-3', and a stabilising agent. The compositions form particles which have increased immunomodulatory activity as compared to IMCs not formulated in the compositions of the invention. The immunomodulatory compositions can be used for immunomodulation of an individual, e.g. when the individual suffers from a disorder associated with a Th2-type immune response (e.g. allergies or allergy-induced asthma), is receiving vaccines such as therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a mycobacterial epitope or a tumour associated epitope) or prophylactic vaccines, suffers from cancer, suffers from an infectious disease or is at risk of exposure to an infectious agent.
XX Sequence 10 BP; 2 A; 2 C; 3 G; 3 T; 0 U; 0 Other;
SQ
Query Match 68.0%; Score 6.8; DB 12; Length 10;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCGKTCG 10
Db :|||:||||
2 GAACGTCG 10
RESULT 53
ADK67595
ID ADK67595 standard; DNA; 10 BP.
XX
XX AC ADK67595;
XX
XX DT 06-MAY-2004 (first entry)
XX
XX DE Immunostimulant oligonucleotide used in immunomodulatory composition.
XX Immunomodulator; immunostimulant; vaccine; ss.
XX Synthetic.
XX Key Location/Qualifiers
FT modified_base 5 /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 5-bromocytosine"

XX WO2004014322-A2.
XX 19-FEB-2004.
XX 12-AUG-2003; 2003WO-US025415.
XX 12-AUG-2002; 2002US-0402968P.
XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
XX Van Nest G, Tuck S;
XX WPI; 2004-238627/22.
XX Immunomodulatory composition useful for modulating immune responses in individuals, comprises immunomodulatory particles or a particulate composition made by mixing cationic condensing agent and an immunomodulatory compound.
XX Disclosure; SEQ ID NO 25; 90pp; English.
XX The present sequence is that of an immunomodulatory compound (IMC) that can be used in novel immunomodulatory compositions of the invention. The IMC may contain modifications of the 3'OH or 5'OH group, the nucleotide base, the sugar component and phosphate group. Novel immunomodulatory compositions of the invention comprise a cationic condensing agent, an IMC comprising the nucleotide sequence 5'-CG-3', and a stabilising agent. The compositions form particles which have increased immunomodulatory activity as compared to IMCs not formulated in the compositions of the invention. The immunomodulatory compositions can be used for immunomodulation of an individual, e.g. when the individual suffers from a disorder associated with a Th2-type immune response (e.g. allergies or allergy-induced asthma), is receiving vaccines such as therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a mycobacterial epitope or a tumour associated epitope) or prophylactic vaccines, suffers from cancer, suffers from an infectious disease or is at risk of exposure to an infectious agent.
XX Sequence 10 BP; 2 A; 2 C; 3 G; 3 T; 0 U; 0 Other;
SQ
Query Match 68.0%; Score 6.8; DB 12; Length 10;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCGKTCG 10
Db :|||:||||
2 GAACGTCG 10
RESULT 53
ADK67590/c
ID ADK67590 standard; DNA; 10 BP.
XX
XX AC ADK67590;
XX
XX DT 06-MAY-2004 (first entry)
XX
XX DE Immunostimulant oligonucleotide 10TCG, for immunomodulatory composition.
XX Immunomodulator; immunostimulant; vaccine; ss.
XX Synthetic.
XX WO2004014322-A2.
XX 19-FEB-2004.
XX 12-AUG-2003; 2003WO-US025415.
XX 12-AUG-2002; 2002US-0402968P.
XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
PA

XX
PI Van Nest G, Tuck S;
XX
DR WPI; 2004-238627/22.
XX
PT Immunomodulatory composition useful for modulating immune responses in
PT individuals, comprises immunomodulatory particles or a particulate
PT composition made by mixing cationic condensing agent and an
PT immunomodulatory compound.
XX
PS Example 4; SEQ ID NO 20; 90pp; English.
XX
CC The present sequence is that of an immunomodulatory compound (IMC),
CC designated 10TCG, that can be used in novel immunomodulatory compositions
CC of the invention. The IMC may contain modifications of the 3'OH or 5'OH
CC group, the nucleotide base, the sugar component and phosphate group.
CC Novel immunomodulatory compositions of the invention comprise a cationic
CC condensing agent, an IMC comprising the nucleotide sequence 5'-CG-3', and
CC a stabilising agent. The compositions form particles which have increased
CC immunomodulatory activity as compared to IMCs not formulated in the
CC compositions of the invention. The immunomodulatory compositions can be
CC used for immunomodulation of an individual, e.g. when the individual
CC suffers from a disorder associated with a Th2-type immune response (e.g.
CC allergies or allergy-induced asthma), is receiving vaccines such as
CC therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a
CC mycobacterial epitope or a tumour associated epitope) or prophylactic
CC vaccines, suffers from cancer, suffers from an infectious disease or is
CC at risk of exposure to an infectious agent. In an example from the
CC invention, IMC 10TCG was used to examine immunomodulation of human cells
CC with particulate compositions incorporating a panel of IMC
CC oligonucleotides.
XX
SQ Sequence 10 BP; 2 A; 3 C; 2 G; 3 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
DB :|||:|
10 GAACGTTTCG 2

RESULT 54
ADK67583
ID ADK67583 standard; DNA; 10 BP.
XX
AC ADK67583;
XX
DT 06-MAY-2004 (first entry)
XX
DE Immunostimulant oligonucleotide used in immunomodulatory composition.
XX
KW Immunomodulator; immunostimulant; vaccine; ss.
XX
OS Synthetic.
XX
PN WO2004014322-A2.
XX
PD 19-FEB-2004.
XX
PF 12-AUG-2003; 2003WO-US025415.
XX
PR 12-AUG-2002; 2002US-0402968P.
XX
PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.
XX
PI Van Nest G, Tuck S;
XX
DR WPI; 2004-238627/22.
XX
PT Immunomodulatory composition useful for modulating immune responses in
PT individuals, comprises immunomodulatory particles or a particulate

PT composition made by mixing cationic condensing agent and an
PT immunomodulatory compound.
XX
PS Disclosure; SEQ ID NO 13; 90pp; English.
XX
CC The present sequence is that of an immunomodulatory compound (IMC) that
CC can be used in novel immunomodulatory compositions of the invention. The
CC IMC may contain modifications of the 3'OH or 5'OH group, the nucleotide
CC base, the sugar component and phosphate group. Novel immunomodulatory
CC compositions of the invention comprise a cationic condensing agent, an
CC IMC comprising the nucleotide sequence 5'-CG-3', and a stabilising agent.
CC The compositions form particles which have increased immunomodulatory
CC activity as compared to IMCs not formulated in the compositions of the
CC invention. The immunomodulatory compositions can be used for
CC immunomodulation of an individual, e.g. when the individual suffers from
CC a disorder associated with a Th2-type immune response (e.g. allergies or
CC allergy-induced asthma), is receiving vaccines such as therapeutic
CC vaccines (e.g. vaccines comprising an allergy epitope, a mycobacterial
CC epitope or a tumour associated epitope) or prophylactic vaccines, suffers
CC from cancer, suffers from an infectious disease or is at risk of exposure
CC to an infectious agent.
XX
SQ Sequence 10 BP; 2 A; 3 C; 2 G; 3 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
DB :|||:|
2 AACCGTTTCG 10

RESULT 55
ADQ95321
ID ADQ95321 standard; DNA; 10 BP.
XX
AC ADQ95321;
XX
DT 07-OCT-2004 (first entry)
XX
DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 63.
XX
KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antitumor;
KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
KW Immunomodulator; interferon-gamma; IFN-gamma; interferon-alpha;
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "c= 5-bromocytosine"
XX
PN WO2004058159-A2.
XX
PD 15-JUL-2004.
XX
PF 17-DEC-2003; 2003WO-US040417.
XX
PR 23-DEC-2002; 2002US-0436406P.
XX
PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.
XX
PI Fearon KL;
XX
DR WPI; 2004-561515/54.
XX

PT New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.

XX Disclosure; SEQ ID NO 63; 183pp; English.

CC The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IgE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.

XX Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05; Indels 0; Gaps 0;
 Matches 6; Conservative 2; Mismatches 1;

QY 2 DANCGRCTG 10

Db 2 GAACGTTG 10

RESULT 56
 ID ADQ95321/c
 ID ADQ95321 standard; DNA; 10 BP.

XX AC ADQ95321;

XX 07-OCT-2004 (first entry)

XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 63.

XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 XX Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 XX Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 XX Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 XX Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 XX immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 XX IFN-alpha; ss.

XX Synthetic.

XX Key Location/Qualifiers

FT modified_base 5 /*tag= a

FT /mod_base= OTHER

FT /note= "C= 5-bromocytosine"

XX WO2004058159-A2.

XX 15-JUL-2004.

XX 17-DEC-2003; 2003WO-US040417.

XX 23-DEC-2002; 2002US-0436406P.

XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX Fearon KL;

XX WPI; 2004-561515/54.

XX New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.

XX Disclosure; SEQ ID NO 63; 183pp; English.

CC The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IgE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.

XX Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05; Indels 0; Gaps 0;
 Matches 6; Conservative 2; Mismatches 1;

QY 2 DANCGRCTG 10

Db 9 GAACGTTG 1

RESULT 57

ID ADQ95322

ID ADQ95322 standard; DNA; 10 BP.

XX AC ADQ95322;

XX 07-OCT-2004 (first entry)

XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 64.

CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IGE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis, inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced-fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 SQ Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;
 Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANGKTCG 10
 Db :|||:|
 9 GAACGTCG 1
 RESULT 59
 ADQ95323
 ID ADQ95323 standard; DNA; 10 BP.
 AC ADQ95323;
 XX
 DT -07-OCT-2004 (first entry)
 DE
 DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 65.
 XX
 KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculosic; Antileptotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1 /*tag= a
 FT /mod_base= OTHER
 FT /note= "c= 5-bromocytosine"
 FT modified_base 5
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "c= 5-bromocytosine"
 XX
 FN W02004058159-A2.
 XX
 XX 15-JUL-2004.
 XX
 XX 17-DEC-2003; 2003WO-US040417.
 XX
 XX 23-DEC-2002; 2002US-0436406P.
 XX (DYNA-) DYNAXV TECHNOLOGIES CORP.
 XX Fearon KL;
 XX
 XX WPI; 2004-561515/54.
 XX
 PT New branched immunomodulatory compound comprising at least three nucleic

PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.
 XX
 PS Disclosure; SEQ ID NO 65; 183pp; English.
 XX
 CC The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th) 2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IGE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 SQ Sequence 10 BP; 2 A; 3 C; 3 G; 1 T; 1 U; 0 Other;
 Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANGKTCG 10
 Db :|||:|
 2 GAACGTCG 10
 RESULT 60
 ADQ95323/c
 ID ADQ95323 standard; DNA; 10 BP.
 XX
 AC ADQ95323;
 XX
 DT -07-OCT-2004 (first entry)
 DE
 DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 65.
 XX
 KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculosic; Antileptotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1 /*tag= a
 FT /mod_base= OTHER
 FT /note= "c= 5-bromocytosine"
 FT modified_base 5

```

FT FT /*tag= b
FT FT /mod_base= OTHER
FT FT /not6= "C= 5-bromocytosine"
XX PN WO2004058159-A2.
XX PD 15-JUL-2004.
XX PF 17-DEC-2003; 2003WO-US040417.
XX PR 23-DEC-2002; 2002US-0436406P.
XX PA (DYNA-) DYNAXX TECHNOLOGIES CORP.
XX PI Fearon KL;
XX DR WPI; 2004-561515/54.
XX PT New branched immunomodulatory compound comprising at least three nucleic
XX PT acid moieties and at least one branch-point nucleoside, useful for
XX PT modulating an immune response in individual suffering e.g. allergy.
XX PS Disclosure; SEQ ID NO 65; 183pp; English.
XX CC The present invention relates to novel branched immunomodulatory
XX CC compounds (BIC) comprising at least three nucleic acid moieties, at least
XX CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
XX CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
XX CC e.g. the ability to stimulate interferon (IFN)-gamma production from
XX CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
XX CC alpha production from human peripheral blood mononuclear cells and the
XX CC ability to stimulate B cell proliferation. The BIC compounds are useful
XX CC for modulating an immune response in an individual suffering from a
XX CC disorder associated with a T helper (Th)2-type immune response e.g.
XX CC allergy, allergy-induced asthma or an infectious disease; for increasing
XX CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
XX CC are also useful for immunomodulation of cells and individuals; in the
XX CC fields of biomedicine and immunology; for the manufacture of a medicament
XX CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
XX CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
XX CC ameliorating an IgE-related disorder in an individual. The disorders
XX CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
XX CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
XX CC cancer; infectious disease resistant to humoral immune responses (e.g.
XX CC diseases caused by mycobacterial infections and intracellular pathogens,
XX CC cellular pathogens e.g. bacteria or protozoans or by subcellular
XX CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
XX CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
XX CC caused by intracellular parasites such as malaria; leishmaniasis,
XX CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
XX CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
XX CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
XX CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
XX CC the BIC compounds of the invention.
XX SQ Sequence 10 BP; 2 A; 3 C; 3 G; 1 T; 1 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||||
Db 9 GAACGTCG 1

RESULT 61
ADQ95265
ID ADQ95265 standard; DNA; 10 BP.
XX AC ADQ95265;
XX DT 07-OCT-2004 (first entry)

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```

XX XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 7.
XX DE Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
XX KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
XX KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
XX KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antitumor;
XX KW Gastrointestinal; Nephrotropic; Branched immunomodulatory compound;
XX KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
XX KW IFN-alpha; ss.
XX OS Synthetic.
XX XX WO2004058159-A2.
XX PN 15-JUL-2004.
XX PD 17-DEC-2003; 2003WO-US040417.
XX PF 23-DEC-2002; 2002US-0436406P.
XX PR (DYNA-) DYNAXX TECHNOLOGIES CORP.
XX PA Fearon KL;
XX PI WPI; 2004-561515/54.
XX DR New branched immunomodulatory compound comprising at least three nucleic
XX PT acid moieties and at least one branch-point nucleoside, useful for
XX PT modulating an immune response in individual suffering e.g. allergy.
XX PS Disclosure; SEQ ID NO 7; 183pp; English.
XX CC The present invention relates to novel branched immunomodulatory
XX CC compounds (BIC) comprising at least three nucleic acid moieties, at least
XX CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
XX CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
XX CC e.g. the ability to stimulate interferon (IFN)-gamma production from
XX CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
XX CC alpha production from human peripheral blood mononuclear cells and the
XX CC ability to stimulate B cell proliferation. The BIC compounds are useful
XX CC for modulating an immune response in an individual suffering from a
XX CC disorder associated with a T helper (Th)2-type immune response e.g.
XX CC allergy, allergy-induced asthma or an infectious disease; for increasing
XX CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
XX CC are also useful for immunomodulation of cells and individuals; in the
XX CC fields of biomedicine and immunology; for the manufacture of a medicament
XX CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
XX CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
XX CC ameliorating an IgE-related disorder in an individual. The disorders
XX CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
XX CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
XX CC cancer; infectious disease resistant to humoral immune responses (e.g.
XX CC diseases caused by mycobacterial infections and intracellular pathogens,
XX CC cellular pathogens e.g. bacteria or protozoans or by subcellular
XX CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
XX CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
XX CC caused by intracellular parasites such as malaria; leishmaniasis,
XX CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
XX CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
XX CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
XX CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
XX CC the BIC compounds of the invention.
XX SQ Sequence 10 BP; 2 A; 2 C; 3 G; 2 T; 1 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||||
Db 2 GAACGTCG 10

```

RESULT 62
ADQ95271
ID ADQ95271 standard; DNA; 10 BP.
AC ADQ95271;
XX
XX
DT 07-OCT-2004 (first entry)
XX
XX
DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 13.
XX
XX
KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
KW IFN-alpha; ss.
XX
OS Synthetic.
XX
XX WO2004058159-A2.
XX
XX
PD 15-JUL-2004.
XX
XX
PF 17-DEC-2003; 2003WO-US040417.
XX
XX
PR 23-DEC-2002; 2002US-0436406P.
XX
PA (DYNA-) DYNAXV TECHNOLOGIES CORP.
XX
PI Fearon KL;
XX
XX WPI; 2004-561515/54.
XX
XX
PT New branched immunomodulatory compound comprising at least three nucleic
PT acid moieties and at least one branch-point nucleoside, useful for
PT modulating an immune response in individual suffering e.g. allergy.
XX
XX
PS Disclosure; SEQ ID NO 13; 183pp; English.
XX
XX
CC The present invention relates to novel branched immunomodulatory
CC compounds (BIC) comprising at least three nucleic acid moieties, at least
CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
CC e.g. the ability to stimulate interferon (IFN)-gamma production from
CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
CC alpha production from human peripheral blood mononuclear cells and the
CC ability to stimulate B cell proliferation. The BIC compounds are useful
CC for modulating an immune response in an individual suffering from a
CC disorder associated with a T helper (Th) 2-type immune response e.g.
CC allergy, allergy-induced asthma or an infectious disease; for increasing
CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
CC are also useful for immunomodulation of cells and individuals; in the
CC fields of biomedicine and immunology; for the manufacture of a medicament
CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
CC ameliorating an Ige-related disorder in an individual. The disorders
CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
CC cancer; infectious disease resistant to humoral immune responses (e.g.
CC diseases caused by mycobacterial infections and intracellular pathogens,
CC cellular pathogens e.g. bacteria or protozoans or by subcellular
CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
CC leprosy or M. marinum or M. ulcerans infections; herpes viruses; diseases
CC caused by intracellular parasites such as malaria; leishmaniasis,
CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
CC induced fibrosis; hepatic fibrosis including schistosomiasis-induced
CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
CC the BIC compounds of the invention.

SQ Sequence 10 BP; 1 A; 2 C; 4 G; 3 T; 0 U; 0 Other;
Query Match 68.0%; Score 6.8; DB 12; Length 10;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCGRCTCG 10
DB 2 TATCGGTCG 10
RESULT 63
ADQ95318
ID ADQ95318 standard; DNA; 10 BP.
XX
XX ADQ95318;
XX
XX
DT 07-OCT-2004 (first entry)
XX
XX
DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 60.
XX
XX
KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
KW IFN-alpha; ss.
XX
OS Synthetic.
XX
XX
FH Key Location/Qualifiers
FT modified_base 5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "C= 5-bromocytosine"
XX
XX WO2004058159-A2.
XX
XX
PD 15-JUL-2004.
XX
XX
PF 17-DEC-2003; 2003WO-US040417.
XX
XX
PR 23-DEC-2002; 2002US-0436406P.
XX
PA (DYNA-) DYNAXV TECHNOLOGIES CORP.
XX
PI Fearon KL;
XX
XX WPI; 2004-561515/54.
XX
XX
PT New branched immunomodulatory compound comprising at least three nucleic
PT acid moieties and at least one branch-point nucleoside, useful for
PT modulating an immune response in individual suffering e.g. allergy.
XX
XX
PS Disclosure; SEQ ID NO 60; 183pp; English.
XX
XX
CC The present invention relates to novel branched immunomodulatory
CC compounds (BIC) comprising at least three nucleic acid moieties, at least
CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
CC e.g. the ability to stimulate interferon (IFN)-gamma production from
CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
CC alpha production from human peripheral blood mononuclear cells and the
CC ability to stimulate B cell proliferation. The BIC compounds are useful
CC for modulating an immune response in an individual suffering from a
CC disorder associated with a T helper (Th) 2-type immune response e.g.
CC allergy, allergy-induced asthma or an infectious disease; for increasing
CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
CC are also useful for immunomodulation of cells and individuals; in the
CC fields of biomedicine and immunology; for the manufacture of a medicament
CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for

CC ameliorating an IGE-related disorder in an individual. The disorders
 CC eosinophilic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.

XX
 SQ Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGTCTG 10
 Db 2 AACCGTCTG 10
 : |||:|

RESULT 64
 ADQ95320
 ID ADQ95320 standard; DNA; 10 BP.
 AC ADQ95320;
 XX
 XX 07-OCT-2004 (first entry)

DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 62.

XX
 KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculosis; Antileptotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.

XX
 OS Synthetic.

XX
 FH Key Location/Qualifiers
 FT modified_base 1 /*tag= a
 FT /mod_base= OTHER
 FT /note= "c= 5-bromocytosine"
 FT modified_base 5 /*tag= b
 FT /mod_base= OTHER
 FT /note= "c= 5-bromocytosine"

XX
 PN WO2004058159-A2.

XX
 XX 15-JUL-2004.

XX
 XX 17-DEC-2003; 2003WO-US040417.

XX
 XX 23-DEC-2002; 2002US-0436406P.

XX
 XX (DYNA-) DYNAXX TECHNOLOGIES CORP.

XX
 XX Fearon KL;

XX
 XX WPI; 2004-561515/54.

XX
 XX New branched immunomodulatory compound comprising at least three nucleic
 XX acid moieties and at least one branch-point nucleoside, useful for
 XX modulating an immune response in individual suffering e.g. allergy.

XX
 PS Disclosure; SEQ ID NO 62; 183pp; English.

XX
 CC The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IGE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.

XX
 SQ Sequence 10 BP; 1 A; 4 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGTCTG 10
 Db 2 GACCGTCTG 10
 : |||:|

RESULT 65
 ADQ95320/c
 ID ADQ95320 standard; DNA; 10 BP.
 AC ADQ95320;
 XX
 XX 07-OCT-2004 (first entry)

XX
 DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 62.

XX
 KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculosis; Antileptotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.

XX
 OS Synthetic.

XX
 FH Key Location/Qualifiers
 FT modified_base 1 /*tag= a
 FT /mod_base= OTHER
 FT /note= "c= 5-bromocytosine"
 FT modified_base 5 /*tag= b
 FT /mod_base= OTHER

FT XX /note= "c= 5-bromocytosine"

FN XX WO2004058159-A2.

XX XX 15-JUL-2004.

PD XX

XX XX 17-DEC-2003; 2003WO-US040417.

PF XX

XX XX 23-DEC-2002; 2002US-0436406P.

PR XX

XX XX (DYNA-) DYNAXVAX TECHNOLOGIES CORP.

PA XX

PI XX Fearon KL;

XX XX WPI; 2004-561515/54.

DR XX

XX XX New branched immunomodulatory compound comprising at least three nucleic acid moieties and at least one branch-point nucleoside, useful for modulating an immune response in individual suffering e.g. allergy.

PT XX

PT XX Disclosure; SEQ ID NO 62; 183pp; English.

PS XX

XX XX The present invention relates to novel branched immunomodulatory compounds (BIC) comprising at least three nucleic acid moieties, at least one of which comprises the nucleotide sequence 5'-CG-3', and at least one branch-point nucleoside. The BIC compounds has immunomodulatory activity e.g. the ability to stimulate interferon (IFN)-gamma production from human peripheral blood mononuclear cells, the ability to stimulate IFN-alpha production from human peripheral blood mononuclear cells and the ability to stimulate B cell proliferation. The BIC compounds are useful for modulating an immune response in an individual suffering from a disorder associated with a T helper (Th)2-type immune response e.g. allergy, allergy-induced asthma or an infectious disease; for increasing secretion of IFN-gamma by blood cells in an individual. The BIC compounds are also useful for immunomodulation of cells and individuals; in the fields of biomedicine and immunology; for the manufacture of a medicament ; for treating idiopathic pulmonary fibrosis, viral infection (e.g. hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for ameliorating an IGE-related disorder in an individual. The disorders includes atopic dermatitis, eosinophilic gastrointestinal inflammation, eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis; cancer; infectious disease resistant to humoral immune responses (e.g. diseases caused by mycobacterial infections and intracellular pathogens, cellular pathogens e.g. bacteria or protozoans or by subcellular pathogens e.g. viruses); mycobacterial diseases such as tuberculosis, leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases caused by intracellular parasites such as malaria; leishmaniasis, toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-induced fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in the BIC compounds of the invention.

XX XX

SQ Sequence 10 BP; 1 A; 4 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;

Best Local Similarity 66.7%; Pred. No. 2e+05;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTGC 10
: |||:|

Db 9 GAACGGTGC 1

RESULT 66

ADQ95273

ID ADQ95273 standard; DNA; 10 BP.

XX XX

AC ADQ95273;

XX XX

DT 07-OCT-2004 (first entry)

XX XX

DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 15.

XX KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory; Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;

KW Dermatology; Immunosuppressive; Cytostatic; Protozoacide;

KW Tuberculosis; Antileprotic; Antiparasitic; Antimalarial; Antitumor;

KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound; immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;

KW IFN-alpha; ss.

XX OS Synthetic.

XX XX WO2004058159-A2.

XX XX 15-JUL-2004.

PD XX

XX XX 17-DEC-2003; 2003WO-US040417.

PF XX

XX XX 23-DEC-2002; 2002US-0436406P.

PR XX

XX XX (DYNA-) DYNAXVAX TECHNOLOGIES CORP.

PA XX

XX XX Fearon KL;

PI XX

XX XX WPI; 2004-561515/54.

DR XX

XX XX New branched immunomodulatory compound comprising at least three nucleic acid moieties and at least one branch-point nucleoside, useful for modulating an immune response in individual suffering e.g. allergy.

PT XX

PT XX Disclosure; SEQ ID NO 15; 183pp; English.

PS XX

XX XX The present invention relates to novel branched immunomodulatory compounds (BIC) comprising at least three nucleic acid moieties, at least one of which comprises the nucleotide sequence 5'-CG-3', and at least one branch-point nucleoside. The BIC compounds has immunomodulatory activity e.g. the ability to stimulate interferon (IFN)-gamma production from human peripheral blood mononuclear cells, the ability to stimulate IFN-alpha production from human peripheral blood mononuclear cells and the ability to stimulate B cell proliferation. The BIC compounds are useful for modulating an immune response in an individual suffering from a disorder associated with a T helper (Th)2-type immune response e.g. allergy, allergy-induced asthma or an infectious disease; for increasing secretion of IFN-gamma by blood cells in an individual. The BIC compounds are also useful for immunomodulation of cells and individuals; in the fields of biomedicine and immunology; for the manufacture of a medicament ; for treating idiopathic pulmonary fibrosis, viral infection (e.g. hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for ameliorating an IGE-related disorder in an individual. The disorders includes atopic dermatitis, eosinophilic gastrointestinal inflammation, eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis; cancer; infectious disease resistant to humoral immune responses (e.g. diseases caused by mycobacterial infections and intracellular pathogens, cellular pathogens e.g. bacteria or protozoans or by subcellular pathogens e.g. viruses); mycobacterial diseases such as tuberculosis, leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases caused by intracellular parasites such as malaria; leishmaniasis, toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-induced fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in the BIC compounds of the invention.

XX XX

SQ Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;

Best Local Similarity 66.7%; Pred. No. 2e+05;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTGC 10
: |||:|

Db 2 AACCGTGC 10

RESULT 67
ADQ95277
ID ADQ95277 standard; DNA; 10 BP.
XX
AC ADQ95277;
XX
DT 07-OCT-2004 (first entry)
XX
DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 19.
XX
KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antitumor;
KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
KW IFN-alpha; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1 /*tag= a
FT /mod_base= OTHER
FT /note= "C= 5-bromocytosine"
XX
XX WO2004058159-A2.
XX
XX 15-JUL-2004.
XX
XX 17-DEC-2003; 2003WO-US040417.
XX
XX 23-DEC-2002; 2002US-0436406P.
XX
XX (DYNA-) DYNAXX TECHNOLOGIES CORP.
XX
XX Fearon KL;
XX WPI; 2004-561515/54.
XX
XX New branched immunomodulatory compound comprising at least three nucleic
PT acid moieties and at least one branch-point nucleoside, useful for
PT modulating an immune response in individual suffering e.g. allergy.
XX
XX Disclosure; SEQ ID NO 19; 183pp; English.
XX
XX The present invention relates to novel branched immunomodulatory
CC compounds (BIC) comprising at least three nucleic acid moieties, at least
CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
CC e.g. the ability to stimulate interferon (IFN)-gamma production from
CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
CC alpha production from human peripheral blood mononuclear cells and the
CC ability to stimulate B cell proliferation. The BIC compounds are useful
CC for modulating an immune response in an individual suffering from a
CC disorder associated with a T helper (Th) 2-type immune response e.g.
CC allergy, allergy-induced asthma or an infectious disease; for increasing
CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
CC are also useful for immunomodulation of cells and individuals; in the
CC fields of biomedicine and immunology; for the manufacture of a medicament
CC for treating idiopathic pulmonary fibrosis, viral infection (e.g.
CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
CC ameliorating an Ige-related disorder in an individual. The disorders
CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
CC cancer; infectious disease resistant to humoral immune responses (e.g.
CC diseases caused by mycobacterial infections and intracellular pathogens,
CC cellular pathogens e.g. bacteria or protozoans or by subcellular
CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
CC leprosy or M. marinum or P. carinii infections; herpes viruses; diseases
CC caused by intracellular parasites such as malaria; leishmaniasis,
CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-

CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
CC the BIC compounds of the invention.
XX
SQ Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;
Query Match 68.0%; Score 6.8; DB 12; Length 10;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTGC 10
Db 2 GAACGCTGC 10
RESULT 68
ADQ95277/c
ID ADQ95277 standard; DNA; 10 BP.
XX
AC ADQ95277;
XX
DT 07-OCT-2004 (first entry)
XX
DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 19.
XX
KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antitumor;
KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
KW IFN-alpha; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1 /*tag= a
FT /mod_base= OTHER
FT /note= "C= 5-bromocytosine"
XX
XX WO2004058159-A2.
XX
XX 15-JUL-2004.
XX
XX 17-DEC-2003; 2003WO-US040417.
XX
XX 23-DEC-2002; 2002US-0436406P.
XX
XX (DYNA-) DYNAXX TECHNOLOGIES CORP.
XX
XX Fearon KL;
XX WPI; 2004-561515/54.
XX
XX New branched immunomodulatory compound comprising at least three nucleic
PT acid moieties and at least one branch-point nucleoside, useful for
PT modulating an immune response in individual suffering e.g. allergy.
XX
XX Disclosure; SEQ ID NO 19; 183pp; English.
XX
XX The present invention relates to novel branched immunomodulatory
CC compounds (BIC) comprising at least three nucleic acid moieties, at least
CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
CC e.g. the ability to stimulate interferon (IFN)-gamma production from
CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
CC alpha production from human peripheral blood mononuclear cells and the
CC ability to stimulate B cell proliferation. The BIC compounds are useful
CC for modulating an immune response in an individual suffering from a
CC disorder associated with a T helper (Th) 2-type immune response e.g.
CC allergy, allergy-induced asthma or an infectious disease; for increasing
CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
CC are also useful for immunomodulation of cells and individuals; in the
CC fields of biomedicine and immunology; for the manufacture of a medicament
CC for treating idiopathic pulmonary fibrosis, viral infection (e.g.
CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
CC ameliorating an Ige-related disorder in an individual. The disorders
CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
CC cancer; infectious disease resistant to humoral immune responses (e.g.
CC diseases caused by mycobacterial infections and intracellular pathogens,
CC cellular pathogens e.g. bacteria or protozoans or by subcellular
CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
CC leprosy or M. marinum or P. carinii infections; herpes viruses; diseases
CC caused by intracellular parasites such as malaria; leishmaniasis,
CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-

are also useful for immunomodulation of cells and individuals; in the fields of biomedicine and immunology; for the manufacture of a medicament; for treating idiopathic pulmonary fibrosis, viral infection (e.g. hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for ameliorating an IGE-related disorder in an individual. The disorders includes atopic dermatitis, eosinophilic gastrointestinal inflammation, eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis; cancer; infectious disease resistant to humoral immune responses (e.g. diseases caused by mycobacterial infections and intracellular pathogens, cellular pathogens e.g. bacteria or protozoans or by subcellular pathogens e.g. viruses); mycobacterial diseases such as tuberculosis, leprosy or M. marinum or M. ulcerans infections; herpes viruses; diseases caused by intracellular parasites such as malaria, leishmaniasis, toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-induced fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in the BIC compounds of the invention.

XX SQ Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;
Best Local Similarity 66.7%; Pred. No. 2e+05; Indels 0; Gaps 0;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
DB 9 GAACGCTCG 1

RESULT 69

ADQ95262
ID ADQ95262 standard; DNA; 10 BP.

AC ADQ95262;

DT 07-OCT-2004 (first entry)

DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 4.

KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
KW Tuberculosstatic; Antileprotic; Antiparasitic; Antimalarial; Antitumor;
KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
KW IFN-alpha; ss.

OS Synthetic.

XX Key Location/Qualifiers
FH modified_base 1
FT /tag= a
FT /mod_base= OTHER
FT /note= "n= T, G, C or 5-bromocytosine"

XX WO2004058159-A2.

XX 15-JUL-2004.

XX 17-DEC-2003; 2003WO-US040417.

XX 23-DEC-2002; 2002US-0436406P.

XX (DYNA-) DYNAX TECHNOLOGIES CORP.

XX Fearon KL;

XX WPI; 2004-561515/54.

XX New branched immunomodulatory compound comprising at least three nucleic acid moieties and at least one branch-point nucleoside, useful for modulating an immune response in individual suffering e.g. allergy.

XX Disclosure; SEQ ID NO 4; 183pp; English.

XX The present invention relates to novel branched immunomodulatory compounds (BIC) comprising at least three nucleic acid moieties, at least one of which comprises the nucleotide sequence 5'-CG-3', and at least one branch-point nucleoside. The BIC compounds has immunomodulatory activity e.g. the ability to stimulate interferon (IFN)-gamma production from human peripheral blood mononuclear cells, the ability to stimulate IFN-alpha production from human peripheral blood mononuclear cells and the ability to stimulate B cell proliferation. The BIC compounds are useful for modulating an immune response in an individual suffering from a disorder associated with a T helper (Th) 2-type immune response e.g. allergy, allergy-induced asthma or an infectious disease; for increasing secretion of IFN-gamma by blood cells in an individual. The BIC compounds are also useful for immunomodulation of cells and individuals; in the fields of biomedicine and immunology; for the manufacture of a medicament; for treating idiopathic pulmonary fibrosis, viral infection (e.g. hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for ameliorating an IGE-related disorder in an individual. The disorders includes atopic dermatitis, eosinophilic gastrointestinal inflammation, eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis; cancer; infectious disease resistant to humoral immune responses (e.g. diseases caused by mycobacterial infections and intracellular pathogens, cellular pathogens e.g. bacteria or protozoans or by subcellular pathogens e.g. viruses); mycobacterial diseases such as tuberculosis, leprosy or M. marinum or M. ulcerans infections; herpes viruses; diseases caused by intracellular parasites such as malaria, leishmaniasis, toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-induced fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in the BIC compounds of the invention.

XX SQ Sequence 10 BP; 1 A; 2 C; 2 G; 1 T; 0 U; 4 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;
Best Local Similarity 88.9%; Pred. No. 2e+05; Indels 0; Gaps 0;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
DB 2 DAHCKGCTCG 10

RESULT 70

ADQ95278
ID ADQ95278 standard; DNA; 10 BP.

XX ADQ95278;

XX 07-OCT-2004 (first entry)

DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 20.
XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
KW Tuberculosstatic; Antileprotic; Antiparasitic; Antimalarial; Antitumor;
KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
KW IFN-alpha; ss.

OS Synthetic.

XX WO2004058159-A2.

XX 15-JUL-2004.

XX 17-DEC-2003; 2003WO-US040417.

XX 23-DEC-2002; 2002US-0436406P.

PA (DYNA-) DYNAXVAX TECHNOLOGIES CORP.

XX Fearon KL;

XX WPI; 2004-561515/54.

XX New branched immunomodulatory compound comprising at least three nucleic acid moieties and at least one branch-point nucleoside, useful for modulating an immune response in individual suffering e.g. allergy.

XX Disclosure; SEQ ID NO 20; 183pp; English.

XX The present invention relates to novel branched immunomodulatory compounds (BIC) comprising at least three nucleic acid moieties, at least one of which comprises the nucleotide sequence 5'-CG-3', and at least one branch-point nucleoside. The BIC compounds has immunomodulatory activity e.g. the ability to stimulate interferon (IFN)-gamma production from human peripheral blood mononuclear cells, the ability to stimulate IFN-alpha production from human peripheral blood mononuclear cells and the ability to stimulate B cell proliferation. The BIC compounds are useful for modulating an immune response in an individual suffering from a disorder associated with a T helper (Th)2-type immune response e.g. allergy, allergy-induced asthma or an infectious disease; for increasing secretion of IFN-gamma by blood cells in an individual. The BIC compounds are also useful for immunomodulation of cells and individuals; in the fields of biomedicine and immunology; for the manufacture of a medicament ; for treating idiopathic pulmonary fibrosis, viral infection (e.g. hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for ameliorating an IGE-related disorder in an individual. The disorders includes atopic dermatitis, eosinophilic gastrointestinal inflammation, eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis; cancer; infectious disease resistant to humoral immune responses (e.g. diseases caused by mycobacterial infections and intracellular pathogens, cellular pathogens e.g. bacteria or protozoans or by subcellular pathogens e.g. viruses); mycobacterial diseases such as tuberculosis, leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases caused by intracellular parasites such as malaria; leishmaniasis, toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-induced fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in the BIC compounds of the invention.

XX Sequence 10 BP; 2 A; 2 C; 2 G; 3 T; 1 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;

Best Local Similarity 66.7%; Pred. No. 2e+05;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

Db 2 TACGCTCG 10

RESULT 71

ADQ95311

ID ADQ95311 standard; DNA; 10 BP.

XX ADQ95311;

XX 07-OCT-2004 (first entry)

XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 53.

XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulatory; Respiratory; Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory; Dermatological; Immunosuppressive; Cytostatic; Protozoacide; Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antitumor; Gastrointestinal; Nephrotropic; branched immunomodulatory compound; Immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha; IFN-alpha; ss.

XX Synthetic.

XX Key modified_base 1 Location/Qualifiers

XX /tag= a

XX /mod_base= OTHER

XX /note= "n= T, G, C or 5-bromocytosine"

XX modified_base 5

XX /tag= b

XX /mod_base= OTHER

XX /note= "c= 5-bromocytosine"

XX WO2004058159-A2.

XX 15-JUL-2004.

XX 17-DEC-2003; 2003WO-US040417.

XX 23-DEC-2002; 2002US-0436406P.

XX (DYNA-) DYNAXVAX TECHNOLOGIES CORP.

XX Fearon KL;

XX WPI; 2004-561515/54.

XX New branched immunomodulatory compound comprising at least three nucleic acid moieties and at least one branch-point nucleoside, useful for modulating an immune response in individual suffering e.g. allergy.

XX Disclosure; SEQ ID NO 53; 183pp; English.

XX The present invention relates to novel branched immunomodulatory compounds (BIC) comprising at least three nucleic acid moieties, at least one of which comprises the nucleotide sequence 5'-CG-3', and at least one branch-point nucleoside. The BIC compounds has immunomodulatory activity e.g. the ability to stimulate interferon (IFN)-gamma production from human peripheral blood mononuclear cells, the ability to stimulate IFN-alpha production from human peripheral blood mononuclear cells and the ability to stimulate B cell proliferation. The BIC compounds are useful for modulating an immune response in an individual suffering from a disorder associated with a T helper (Th)2-type immune response e.g. allergy, allergy-induced asthma or an infectious disease; for increasing secretion of IFN-gamma by blood cells in an individual. The BIC compounds are also useful for immunomodulation of cells and individuals; in the fields of biomedicine and immunology; for the manufacture of a medicament ; for treating idiopathic pulmonary fibrosis, viral infection (e.g. hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for ameliorating an IGE-related disorder in an individual. The disorders includes atopic dermatitis, eosinophilic gastrointestinal inflammation, eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis; cancer; infectious disease resistant to humoral immune responses (e.g. diseases caused by mycobacterial infections and intracellular pathogens, cellular pathogens e.g. bacteria or protozoans or by subcellular pathogens e.g. viruses); mycobacterial diseases such as tuberculosis, leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases caused by intracellular parasites such as schistosomiasis; inflammatory disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-induced fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in the BIC compounds of the invention.

XX Sequence 10 BP; 1 A; 2 C; 2 G; 1 T; 0 U; 4 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;

Best Local Similarity 88.9%; Pred. No. 2e+05;

Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

Db 2 DAHCKGTCG 10

RESULT 72
ADQ95312 ID ADQ95312 standard; DNA; 10 BP.
XX AC ADQ95312;
XX DT 07-OCT-2004 (first entry)
XX DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 54.
XX KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulatory; Respiratory;
KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
KW IFN-alpha; ss.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX modified_base 5 /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "c= 5-bromocytosine"
XX WO2004058159-A2.
XX PN 15-JUL-2004.
XX PD 17-DEC-2003; 2003WO-US040417.
XX PF 23-DEC-2002; 2002US-0436406P.
XX PR (DYNA-) DYNAVAX TECHNOLOGIES CORP.
XX PA Fearon KL;
XX PI WPI; 2004-561515/54.
XX DR New branched immunomodulatory compound comprising at least three nucleic
XX acid moieties and at least one branch-point nucleoside, useful for
XX PT modulating an immune response in individual suffering e.g. allergy.
XX PS Disclosure; SEQ ID NO 54; 183pp; English.
XX CC The present invention relates to novel branched immunomodulatory
CC compounds (BIC) comprising at least three nucleic acid moieties, at least
CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
CC e.g. the ability to stimulate interferon (IFN)-gamma production from
CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
CC alpha production from human peripheral blood mononuclear cells and the
CC ability to stimulate B cell proliferation. The BIC compounds are useful
CC for modulating an immune response in an individual suffering from a
CC disorder associated with a T helper (Th)2-type immune response e.g.
CC allergy, allergy-induced asthma or an infectious disease; for increasing
CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
CC are also useful for immunomodulation of cells and individuals; in the
CC fields of biomedicine and immunology; for the manufacture of a medicament
CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
CC ameliorating an Igs-related disorder in an individual. The disorders
CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
CC cancer; infectious disease resistant to humoral immune responses (e.g.
CC diseases caused by mycobacterial infections and intracellular pathogens,
CC cellular pathogens e.g. bacteria or protozoans or by subcellular
CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
CC caused by intracellular parasites such as malaria; leishmaniasis,
CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-

CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
CC the BIC compounds of the invention.
XX SQ Sequence 10 BP; 2 A; 2 C; 3 G; 3 T; 0 U; 0 Other;
Query Match 68.0%; Score 6.8; DB 12; Length 10;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
Db 2 GAACGTCG 10
RESULT 73
ADQ95317 ID ADQ95317 standard; DNA; 10 BP.
XX AC ADQ95317;
XX DT 07-OCT-2004 (first entry)
XX DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 59.
XX KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulatory; Respiratory;
KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
KW IFN-alpha; ss.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX modified_base 5 /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "c= 5-bromocytosine"
XX WO2004058159-A2.
XX PN 15-JUL-2004.
XX PD 17-DEC-2003; 2003WO-US040417.
XX PF 23-DEC-2002; 2002US-0436406P.
XX PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.
XX PI Fearon KL;
XX DR WPI; 2004-561515/54.
XX PT New branched immunomodulatory compound comprising at least three nucleic
XX acid moieties and at least one branch-point nucleoside, useful for
XX PT modulating an immune response in individual suffering e.g. allergy.
XX PS Disclosure; SEQ ID NO 59; 183pp; English.
XX CC The present invention relates to novel branched immunomodulatory
CC compounds (BIC) comprising at least three nucleic acid moieties, at least
CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
CC e.g. the ability to stimulate interferon (IFN)-gamma production from
CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
CC alpha production from human peripheral blood mononuclear cells and the
CC ability to stimulate B cell proliferation. The BIC compounds are useful
CC for modulating an immune response in an individual suffering from a
CC disorder associated with a T helper (Th)2-type immune response e.g.
CC allergy, allergy-induced asthma or an infectious disease; for increasing
CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds

are also useful for immunomodulation of cells and individuals; in the fields of biomedicine and immunology; for the manufacture of a medicament for treating idiopathic pulmonary fibrosis, viral infection (e.g. hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for ameliorating an IGE-related disorder in an individual. The disorders includes atopic dermatitis, eosinophilic gastrointestinal inflammation, eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis; cancer; infectious disease resistant to humoral immune responses (e.g. diseases caused by mycobacterial infections and intracellular pathogens, cellular pathogens e.g. bacteria or protozoans or by subcellular pathogens e.g. viruses); mycobacterial diseases such as tuberculosis, leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases caused by intracellular parasites such as malaria; leishmaniasis, toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-induced fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in the BIC compounds of the invention.

Sequence 10 BP; 1 A; 3 C; 3 G; 3 T; 0 U; 0 Other;
 Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 : |||: |||
 Db 2 TACCGTTCG 10

RESULT 74
 ADQ95266
 ID ADQ95266 standard; DNA; 10 BP.
 XX
 AC ADQ95266;
 XX
 DT 07-OCT-2004 (first entry)
 XX
 DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 8.
 XX
 KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileptotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.
 XX
 OS Synthetic.
 XX
 XN WO2004058159-A2.
 XX
 PD 15-JUL-2004.
 XX
 PF 17-DEC-2003; 2003WO-US040417.
 XX
 PR 23-DEC-2002; 2002US-0436406P.
 XX
 XX (DYNA-) DYNAXX TECHNOLOGIES CORP.
 XX
 XX Fearon KL;
 XX
 DR WPI; 2004-561515/54.
 XX
 XX New branched immunomodulatory compound comprising at least three nucleic acid moieties and at least one branch-point nucleoside useful for modulating an immune response in individual suffering e.g. allergy.
 XX
 XX Disclosure; SEQ ID NO 8; 183pp; English.
 XX
 XX The present invention relates to novel branched immunomodulatory compounds (BIC) comprising at least three nucleic acid moieties, at least one of which comprises the nucleotide sequence 5'-CG-3', and at least one

branch-point nucleoside. The BIC compounds has immunomodulatory activity e.g. the ability to stimulate interferon (IFN)-gamma production from human peripheral blood mononuclear cells, the ability to stimulate IFN-alpha production from human peripheral blood mononuclear cells and the ability to stimulate B cell proliferation. The BIC compounds are useful for modulating an immune response in an individual suffering from a disorder associated with a T helper (Th)2-type immune response e.g. allergy, allergy-induced asthma or an infectious disease; for increasing secretion of IFN-gamma by blood cells in an individual. The BIC compounds are also useful for immunomodulation of cells and individuals; in the fields of biomedicine and immunology; for the manufacture of a medicament for treating idiopathic pulmonary fibrosis, viral infection (e.g. hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for ameliorating an IGE-related disorder in an individual. The disorders includes atopic dermatitis, eosinophilic gastrointestinal inflammation, eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis; cancer; infectious disease resistant to humoral immune responses (e.g. diseases caused by mycobacterial infections and intracellular pathogens, cellular pathogens e.g. bacteria or protozoans or by subcellular pathogens e.g. viruses); mycobacterial diseases such as tuberculosis, leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases caused by intracellular parasites such as malaria; leishmaniasis, toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-induced fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in the BIC compounds of the invention.

Sequence 10 BP; 1 A; 3 C; 3 G; 3 T; 0 U; 0 Other;
 Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 : |||: |||
 Db 2 TACCGTTCG 10

RESULT 75
 ADQ95267
 ID ADQ95267 standard; DNA; 10 BP.
 XX
 AC ADQ95267;
 XX
 DT 07-OCT-2004 (first entry)
 XX
 DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 9.
 XX
 KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileptotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.
 XX
 OS Synthetic.
 XX
 XN WO2004058159-A2.
 XX
 PD 15-JUL-2004.
 XX
 PF 17-DEC-2003; 2003WO-US040417.
 XX
 PR 23-DEC-2002; 2002US-0436406P.
 XX
 XX (DYNA-) DYNAXX TECHNOLOGIES CORP.
 XX
 XX Fearon KL;
 XX
 DR WPI; 2004-561515/54.
 XX

PT New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties, and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.

XX Disclosure; SEQ ID NO 9; 183pp; English.

XX The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IGE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.

XX Sequence 10 BP; 1 A; 2 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCGRKTCG 10

Db 2 GATCGGTCG 10

RESULT 76
 ADQ95319
 ID ADQ95319 standard; DNA; 10 BP.

XX ADQ95319;

XX 07-OCT-2004 (first entry)

XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 61.

KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antitumor;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.

XX Synthetic.

XX Key Location/Qualifiers

XX modified_base 5

XX /*tag= a

XX /mod_base= OTHER

XX /note= "c= 5-bromocytosine"

XX

PN WO2004058159-A2.

XX 15-JUL-2004.

PD

XX 17-DEC-2003; 2003WO-US040417.

PF

XX 23-DEC-2002; 2002US-0436406P.

PR

XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.

PA

XX Fearon KL;

PI

XX WPI; 2004-561515/54.

XX

XX New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.

XX Disclosure; SEQ ID NO 61; 183pp; English.

XX The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IGE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.

XX Sequence 10 BP; 3 A; 2 C; 3 G; 1 T; 1 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;

Best Local Similarity 66.7%; Pred. No. 2e+05;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCGRKTCG 10

Db 2 AAACGUTCG 10

RESULT 77

ADQ95269

ID ADQ95269 standard; DNA; 10 BP.

XX

XX ADQ95269;

XX

XX 07-OCT-2004 (first entry)

XX

XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 11.

KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulatory; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.
 XX
 XX Synthetic.
 XX
 XX W02004058159-A2.
 XX PD 15-JUL-2004.
 XX PF 17-DEC-2003; 2003WO-US040417.
 XX PR 23-DEC-2002; 2002US-0436406P.
 XX PA (DYNA-) DYNAXVAX TECHNOLOGIES CORP.
 XX PI Fearon KL;
 XX WPI; 2004-561515/54.
 XX
 XX New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.
 XX
 XX Disclosure; SEQ ID NO 11; 183pp; English.
 XX
 CC The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an Igs-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 SQ Sequence 10 BP; 2 A; 2 C; 4 G; 2 T; 0 U; 0 Other;
 Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANCGKTCG 10
 Db :|||:|
 2 GAACGGTCG 10
 RESULT 78

ADQ95274
 ID ADQ95274 standard; DNA; 10 BP.
 XX
 AC ADQ95274;
 XX
 DT 07-OCT-2004 (first entry)
 XX
 XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 16.
 XX
 XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulatory; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.
 XX
 XX Synthetic.
 XX
 XX Key Location/Qualifiers
 FT modified_base 1
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "c= 5-bromocytosine"
 XX
 XX W02004058159-A2.
 XX PD 15-JUL-2004.
 XX PF 17-DEC-2003; 2003WO-US040417.
 XX PR 23-DEC-2002; 2002US-0436406P.
 XX PA (DYNA-) DYNAXVAX TECHNOLOGIES CORP.
 XX PI Fearon KL;
 XX WPI; 2004-561515/54.
 XX
 XX New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.
 XX
 XX Disclosure; SEQ ID NO 16; 183pp; English.
 XX
 CC The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an Igs-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX

CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 SQ Sequence 10 BP; 1 A; 4 C; 3 G; 2 T; 0 U; 0 Other;
 Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05; 1; Indels 0; Gaps 0;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 Qy 2 DANCCKTCG 10
 Db 2 GACCGTTCG 10
 RESULT 79
 ADQ95274/c
 ID ADQ95274 standard; DNA; 10 BP.
 XX
 AC ADQ95274;
 XX
 DT 07-OCT-2004 (first entry)
 XX
 DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 16.
 XX
 KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; Branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1 /*tag= a
 FT /mod_base= OTHER
 FT /note= "C= 5-bromocytosine"
 FT
 PN WO2004058159-A2.
 XX
 PD 15-JUL-2004.
 XX
 PF 17-DEC-2003; 2003WO-US040417.
 XX
 PR 23-DEC-2002; 2002US-0436406P.
 XX
 PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 XX
 PI Fearon KL;
 XX
 DR WPI; 2004-561515/54.
 XX
 CC New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.
 XX
 PS Disclosure; SEQ ID NO 16; 183pp; English.
 XX
 CC The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the

CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IGF-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 SQ Sequence 10 BP; 1 A; 4 C; 3 G; 2 T; 0 U; 0 Other;
 Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05; 1; Indels 0; Gaps 0;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 Qy 2 DANCCKTCG 10
 Db 9 GAACGGTTCG 1
 RESULT 80
 ADQ95268
 ID ADQ95268 standard; DNA; 10 BP.
 XX
 AC ADQ95268;
 XX
 DT 07-OCT-2004 (first entry)
 XX
 DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 10.
 XX
 KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; Branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.
 XX
 OS Synthetic.
 XX
 PN WO2004058159-A2.
 XX
 PD 15-JUL-2004.
 XX
 PF 17-DEC-2003; 2003WO-US040417.
 XX
 PR 23-DEC-2002; 2002US-0436406P.
 XX
 PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 XX
 PI Fearon KL;
 XX
 DR WPI; 2004-561515/54.
 XX
 CC New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.
 XX
 PS Disclosure; SEQ ID NO 10; 183pp; English.
 XX
 CC The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity

CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IgE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.

XX Sequence 10 BP; 1 A; 2 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANGGKTCG 10
 : |||||
 Db 2 GATCGTTCG 10

RESULT 81

ADQ95275

ID ADQ95275 standard; DNA; 10 BP.

AC ADQ95275;

DT 07-OCT-2004 (first entry)

XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 17.

XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotrophic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.

XX Synthetic.

XX WO2004058159-A2.

XX 15-JUL-2004.

XX 17-DEC-2003; 2003WO-US040417.

XX 23-DEC-2002; 2002US-0436406P.

XX (DYNA-) DYNAXVAX TECHNOLOGIES CORP.

XX Fearon KU;

XX WPI; 2004-561515/54.

XX New branched immunomodulatory compound comprising at least three nucleic

PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.

XX Disclosure; SEQ ID NO 17; 183pp; English.

XX The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IgE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.

XX Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;

Best Local Similarity 66.7%; Pred. No. 2e+05;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANGGKTCG 10

Db 2 GAACGTCG 10

RESULT 82

ADQ95275/c

ID ADQ95275 standard; DNA; 10 BP.

XX ADQ95275;

DT 07-OCT-2004 (first entry)

XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 17.

XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotrophic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.

XX Synthetic.

XX WO2004058159-A2.

XX 15-JUL-2004.

XX 17-DEC-2003; 2003WO-US040417.

PR 23-DEC-2002; 2002US-0436406P.
 PA (DYNA-) DYNAXVAX TECHNOLOGIES CORP.
 PI Fearon KL;
 XX WPI; 2004-561515/54.
 DR New branched immunomodulatory compound comprising at least three nucleic
 XX acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.
 PT
 XX
 PS Disclosure; SEQ ID NO 17; 183pp; English.
 XX
 CC The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IGE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 SQ Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;
 Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANCGETCG 10
 Db : |||:|
 9 GAACGTTCG 1
 RESULT 83
 ADQ95315
 ID ADQ95315 standard; DNA; 10 BP.
 AC
 XX ADQ95315;
 XX
 DT 07-OCT-2004 (first entry)
 XX
 DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 57.
 XX
 KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide; Antitumor;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.

XX Synthetic.
 OS Key Location/Qualifiers
 XX modified_base 5
 FT /tag= a
 FT /mod_base= OTHER
 FT /note= "C= 5-bromocytosine"
 XX WO2004058159-A2.
 PN
 XX 15-JUL-2004.
 PD
 XX 17-DEC-2003; 2003WO-US040417.
 PF
 XX 23-DEC-2002; 2002US-0436406P.
 PR
 XX (DYNA-) DYNAXVAX TECHNOLOGIES CORP.
 PA
 XX Fearon KL;
 PI WPI; 2004-561515/54.
 DR New branched immunomodulatory compound comprising at least three nucleic
 XX acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.
 PT
 XX Disclosure; SEQ ID NO 57; 183pp; English.
 XX
 CC The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IGE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 SQ Sequence 10 BP; 1 A; 2 C; 4 G; 3 T; 0 U; 0 Other;
 Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANCGETCG 10
 Db : |||:|
 2 GATCGGTTCG 10
 RESULT 84
 ADQ95326

ID ADQ95326 standard; DNA; 10 BP.
XX
AC ADQ95326;
XX
DT 07-OCT-2004 (first entry)
XX
DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 68.
XX
KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antitumor;
KW Gastrointestinal; Nephrotropic; Branched immunomodulatory compound;
KW Immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
KW IFN-alpha; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 5 /tag= a
FT /mod_base= OTHER
FT /note= "c= 5-bromocytosine"
XX
PN WO2004058159-A2.
XX
XX 15-JUL-2004.
XX
PF 17-DEC-2003; 2003WO-US040417.
XX
PR 23-DEC-2002; 2002US-0436406P.
XX
XX (DYNA-) DYNAXVAX TECHNOLOGIES CORP.
PA
PI Fearon KL;
XX
XX WPI; 2004-561515/54.
XX
XX New branched immunomodulatory compound comprising at least three nucleic acid moieties and at least one branch-point nucleoside, useful for modulating an immune response in individual suffering e.g. allergy.
XX
XX Disclosure; SEQ ID NO 68; 183pp; English.
XX
XX The present invention relates to novel branched immunomodulatory compounds (BIC) comprising at least three nucleic acid moieties, at least one of which comprises the nucleotide sequence 5'-CG-3', and at least one branch-point nucleoside. The BIC compounds has immunomodulatory activity e.g. the ability to stimulate interferon (IFN)-gamma production from human peripheral blood mononuclear cells, the ability to stimulate IFN-alpha production from human peripheral blood mononuclear cells and the ability to stimulate B cell proliferation. The BIC compounds are useful for modulating an immune response in an individual suffering from a disorder associated with a T helper (Th)2-type immune response e.g. allergy, allergy-induced asthma or an infectious disease; for increasing secretion of IFN-gamma by blood cells in an individual. The BIC compounds are also useful for immunomodulation of cells and individuals; in the fields of biomedicine and immunology; for the manufacture of a medicament ; for treating idiopathic pulmonary fibrosis, viral infection (e.g. hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for ameliorating an IGE-related disorder in an individual. The disorders includes atopic dermatitis, eosinophilic gastrointestinal inflammation, eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis; cancer; infectious disease resistant to humoral immune responses (e.g. cellular pathogens e.g. bacteria or protozoans or by subcellular pathogens e.g. viruses); mycobacterial diseases such as tuberculosis, leprosy or M. marinum or M. ulcerans infections; herpes viruses; diseases caused by intracellular parasites such as malaria; leishmaniasis, toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-induced fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in

CC the BIC compounds of the invention.
XX
SQ Sequence 10 BP; 2 A; 2 C; 2 G; 4 T; 0 U; 0 Other;
XX
Query Match 68.0%; Score 6.8; DB 12; Length 10;
Best Local Similarity 66.7%; Pred. No. 26+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
XX
QY 2 DANCGKTCG 10
DB 2 TAACGTCG 10
XX
RESULT 85
ADQ95276
ID ADQ95276 standard; DNA; 10 BP.
XX
AC ADQ95276;
XX
DT 07-OCT-2004 (first entry)
XX
DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 18.
XX
KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antitumor;
KW Gastrointestinal; Nephrotropic; Branched immunomodulatory compound;
KW Immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
KW IFN-alpha; ss.
XX
OS Synthetic.
XX
XX WO2004058159-A2.
XX
XX 15-JUL-2004.
XX
XX 17-DEC-2003; 2003WO-US040417.
XX
XX 23-DEC-2002; 2002US-0436406P.
XX
XX (DYNA-) DYNAXVAX TECHNOLOGIES CORP.
XX
XX Fearon KL;
XX
XX WPI; 2004-561515/54.
XX
XX New branched immunomodulatory compound comprising at least three nucleic acid moieties and at least one branch-point nucleoside, useful for modulating an immune response in individual suffering e.g. allergy.
XX
XX Disclosure; SEQ ID NO 18; 183pp; English.
XX
XX The present invention relates to novel branched immunomodulatory compounds (BIC) comprising at least three nucleic acid moieties, at least one of which comprises the nucleotide sequence 5'-CG-3', and at least one branch-point nucleoside. The BIC compounds has immunomodulatory activity e.g. the ability to stimulate interferon (IFN)-gamma production from human peripheral blood mononuclear cells, the ability to stimulate IFN-alpha production from human peripheral blood mononuclear cells and the ability to stimulate B cell proliferation. The BIC compounds are useful for modulating an immune response in an individual suffering from a disorder associated with a T helper (Th)2-type immune response e.g. allergy, allergy-induced asthma or an infectious disease; for increasing secretion of IFN-gamma by blood cells in an individual. The BIC compounds are also useful for immunomodulation of cells and individuals; in the fields of biomedicine and immunology; for the manufacture of a medicament ; for treating idiopathic pulmonary fibrosis, viral infection (e.g. hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for ameliorating an IGE-related disorder in an individual. The disorders includes atopic dermatitis, eosinophilic gastrointestinal inflammation, eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis; cancer; infectious disease resistant to humoral immune responses (e.g. cellular pathogens e.g. bacteria or protozoans or by subcellular pathogens e.g. viruses); mycobacterial diseases such as tuberculosis, leprosy or M. marinum or M. ulcerans infections; herpes viruses; diseases caused by intracellular parasites such as malaria; leishmaniasis, toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-induced fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in

CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses; mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 SQ Sequence 10 BP; 1 A; 4 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;

Best Local Similarity 66.7%; Pred. No. 2e+05; Indels 0; Gaps 0;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

DB 2 GACGGTCG 10

RESULT 86

ADQ95276/c
 ID ADQ95276 standard; DNA; 10 BP.

AC ADQ95276;

DT 07-OCT-2004 (first entry)

DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 18.

XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotrophic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; Branched immunomodulatory compound;
 KW Immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.

OS Synthetic.

XX WO2004058159-A2.

XX 15-JUL-2004.

PF 17-DEC-2003; 2003WO-US040417.

XX 23-DEC-2002; 2002US-0436406P.

XX (DYNA-) DYNAXX TECHNOLOGIES CORP.

XX Fearon KL;

XX WPI; 2004-561515/54.

XX New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.

XX Disclosure; SEQ ID NO 18; 183pp; English.

XX The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th) 2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing

CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IGE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX

SQ Sequence 10 BP; 1 A; 4 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;

Best Local Similarity 66.7%; Pred. No. 2e+05; Indels 0; Gaps 0;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

DB 9 GACGGTCG 1

RESULT 87

ADQ95270
 ID ADQ95270 standard; DNA; 10 BP.

XX ADQ95270;

DT 07-OCT-2004 (first entry)

DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 12.

XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotrophic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; Branched immunomodulatory compound;
 KW Immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.

OS Synthetic.

XX WO2004058159-A2.

XX 15-JUL-2004.

PF 17-DEC-2003; 2003WO-US040417.

XX 23-DEC-2002; 2002US-0436406P.

XX (DYNA-) DYNAXX TECHNOLOGIES CORP.

XX Fearon KL;

XX WPI; 2004-561515/54.

XX New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.

XX Disclosure; SEQ ID NO 12; 183pp; English.

XX The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least

one of which comprises the nucleotide sequence 5'-CG-3', and at least one branch-point nucleoside. The BIC compounds has immunomodulatory activity e.g. the ability to stimulate interferon (IFN)-gamma production from human peripheral blood mononuclear cells, the ability to stimulate IFN-alpha production from human peripheral blood mononuclear cells and the ability to stimulate B cell proliferation. The BIC compounds are useful for modulating an immune response in an individual suffering from a disorder associated with a T helper (Th)2-type immune response e.g. allergy, allergy-induced asthma or an infectious disease; for increasing secretion of IFN-gamma by blood cells in an individual. The BIC compounds are also useful for immunomodulation of cells and individuals; in the fields of biomedicine and immunology; for the manufacture of a medicament ; for treating idiopathic pulmonary fibrosis, viral infection (e.g. hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for ameliorating an IgE-related disorder in an individual. The disorders includes atopic dermatitis, eosinophilic gastrointestinal inflammation, eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis; cancer; infectious disease resistant to humoral immune responses (e.g. diseases caused by mycobacterial infections and intracellular pathogens, cellular pathogens e.g. bacteria or protozoans or by subcellular pathogens e.g. viruses); mycobacterial diseases such as tuberculosis, leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases caused by intracellular parasites such as malaria; leishmaniasis, toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-induced fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in the BIC compounds of the invention.

Sequence 10 BP; 2 A; 2 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;

Best Local Similarity 66.7%; Pred. No. 2e+05;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTTCG 10

Db 2 TAACGTTTCG 10

RESULT 88

ADQ95272

ID ADQ95272 standard; DNA; 10 BP.

AC ADQ95272;

DT 07-OCT-2004 (first entry)

Branched immunomodulatory compound related oligonucleotide, SEQ ID 14.

Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory; Virucide; Antiinflammatory; Hepatotrophic; Anti-HIV; Auditory; Dermatological; Immunosuppressive; Cytostatic; Protozoacide; Tuberculostatic; Antiileptropic; Antiparasitic; Antimalarial; Antiulcer; Gastrointestinal; Nephrotropic; branched immunomodulatory compound; immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha; IFN-alpha; ss.

Synthetic.

WO2004058159-A2.

15-JUL-2004.

17-DEC-2003; 2003WO-US040417.

23-DEC-2002; 2002US-0436406P.

(DYNA-) DYNNAVX TECHNOLOGIES CORP.

Fearon Klr;

WPI; 2004-561515/54.

XX

PT New branched immunomodulatory compound comprising at least three nucleic acid moieties and at least one branch-point nucleoside, useful for modulating an immune response in individual suffering e.g. allergy.

XX Disclosure; SEQ ID NO 14; 183pp; English.

XX The present invention relates to novel branched immunomodulatory compounds (BIC) comprising at least three nucleic acid moieties, at least one of which comprises the nucleotide sequence 5'-CG-3', and at least one branch-point nucleoside. The BIC compounds has immunomodulatory activity e.g. the ability to stimulate interferon (IFN)-gamma production from human peripheral blood mononuclear cells, the ability to stimulate IFN-alpha production from human peripheral blood mononuclear cells and the ability to stimulate B cell proliferation. The BIC compounds are useful for modulating an immune response in an individual suffering from a disorder associated with a T helper (Th)2-type immune response e.g. allergy, allergy-induced asthma or an infectious disease; for increasing secretion of IFN-gamma by blood cells in an individual. The BIC compounds are also useful for immunomodulation of cells and individuals; in the fields of biomedicine and immunology; for the manufacture of a medicament ; for treating idiopathic pulmonary fibrosis, viral infection (e.g. hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for ameliorating an IgE-related disorder in an individual. The disorders includes atopic dermatitis, eosinophilic gastrointestinal inflammation, eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis; cancer; infectious disease resistant to humoral immune responses (e.g. diseases caused by mycobacterial infections and intracellular pathogens, cellular pathogens e.g. bacteria or protozoans or by subcellular pathogens e.g. viruses); mycobacterial diseases such as tuberculosis, leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases caused by intracellular parasites such as malaria; leishmaniasis, toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-induced fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in the BIC compounds of the invention.

Sequence 10 BP; 1 A; 3 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;

Best Local Similarity 66.7%; Pred. No. 2e+05;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTTCG 10

Db 2 TAACGTTTCG 10

RESULT 89

ADQ95314

ID ADQ95314 standard; DNA; 10 BP.

AC ADQ95314;

DT 07-OCT-2004 (first entry)

Branched immunomodulatory compound related oligonucleotide, SEQ ID 56.

Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory; Virucide; Antiinflammatory; Hepatotrophic; Anti-HIV; Auditory; Dermatological; Immunosuppressive; Cytostatic; Protozoacide; Tuberculostatic; Antiileptropic; Antiparasitic; Antimalarial; Antiulcer; Gastrointestinal; Nephrotropic; branched immunomodulatory compound; immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha; IFN-alpha; ss.

Synthetic.

Key Location/Qualifiers

modified_base 5

/*tag= a

/mod_base= OTHER

FT

FT XX /note= "c= 5-bromocytosine"
 FN WO2004058159-A2.
 XX 15-JUL-2004.
 PD 17-DEC-2003; 2003WO-US040417.
 PF 23-DEC-2002; 2002US-0436406P.
 XX (DYNA-) DYNAXX TECHNOLOGIES CORP.
 PA Fearon KL;
 XX WPI; 2004-561515/54.
 DR New branched immunomodulatory compound comprising at least three nucleic
 XX acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.
 PT
 XX Disclosure; SEQ ID NO 56; 183pp; English.
 PS
 XX The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IGE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 SQ Sequence 10 BP; 1 A; 3 C; 3 G; 3 T; 0 U; 0 Other;
 Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANCGETTCG 10
 Db : |||:
 . 2 GACCGTTCG 10
 RESULT 90
 ADQ95333
 ID ADQ95333 standard; DNA; 10 BP.
 XX
 AC ADQ95333;
 XX
 DT 07-OCT-2004 (first entry)
 XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 75.

XX
 KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculogetic; Antileprotic; Antiparasitic; Antimalarial; Anticancer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.
 XX Synthetic.
 OS
 XX
 XX Key Location/Qualifiers
 PH modified_base 1 /*tag= a
 FT /mod_base= OTHER
 FT /note= "n= T, C or 5-bromocytosine"
 FT
 XX WO2004058159-A2.
 XX 15-JUL-2004.
 XX 17-DEC-2003; 2003WO-US040417.
 XX 23-DEC-2002; 2002US-0436406P.
 XX (DYNA-) DYNAXX TECHNOLOGIES CORP.
 PA Fearon KL;
 XX WPI; 2004-561515/54.
 DR New branched immunomodulatory compound comprising at least three nucleic
 XX acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.
 PT
 XX Disclosure; SEQ ID NO 75; 183pp; English.
 PS
 XX The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IGE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 SQ Sequence 10 BP; 1 A; 2 C; 2 G; 1 T; 0 U; 4 Other;
 Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 88.9%; Pred. No. 2e+05;
 Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 DB 2 DANCCKTCG 10

RESULT 91
 ADQ95264
 ID ADQ95264 standard; DNA; 10 BP.
 XX
 AC ADQ95264;
 XX
 DT 07-OCT-2004 (first entry)
 XX
 DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 6.
 XX
 KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.
 XX
 OS Synthetic.
 XX
 PN WO2004058159-A2.
 XX
 PD 15-JUL-2004.
 XX
 PF 17-DEC-2003; 2003WO-US040417.
 XX
 PR 23-DEC-2002; 2002US-0436406P.
 XX
 PA (DYNA-) DYNAXX TECHNOLOGIES CORP.
 XX
 PI Fearon KL;
 XX
 DR WPI; 2004-561515/54.
 XX
 PT New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.
 XX
 PS Disclosure; SEQ ID NO 6; 183pp; English.
 XX
 CC The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an Ige-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis,
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or P. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; Leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-

CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.

QY Sequence 10 BP; 2 A; 2 C; 4 G; 2 T; 0 U; 0 Other;
 DB Best Local Similarity 68.0%; Score 6.8; DB 12; Length 10;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 DB 2 DANCCKTCG 10

RESULT 92
 ADQ95313
 ID ADQ95313 standard; DNA; 10 BP.
 XX
 AC ADQ95313;
 XX
 DT 07-OCT-2004 (first entry)
 XX
 DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 55.
 XX
 KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.
 XX
 OS Synthetic.
 XX
 PN WO2004058159-A2.
 XX
 PD 15-JUL-2004.
 XX
 PF 17-DEC-2003; 2003WO-US040417.
 XX
 PR 23-DEC-2002; 2002US-0436406P.
 XX
 PA (DYNA-) DYNAXX TECHNOLOGIES CORP.
 XX
 PI Fearon KL;
 XX
 DR WPI; 2004-561515/54.
 XX
 PT New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.
 XX
 PS Disclosure; SEQ ID NO 55; 183pp; English.
 XX
 CC The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an Ige-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis,
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or P. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; Leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-

CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an Igs-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.

XX SQ Sequence 10 BP; 2 A; 2 C; 3 G; 2 T; 1 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;

Best Local Similarity 66.7%; Pred. No. 2e+05;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGETCG 10

DB 2 GAACGUTCG 10

RESULT 93

ADQ95325

ID ADQ95325 standard; DNA; 10 BP.

AC ADQ95325;

DT 07-OCT-2004 (first entry)

DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 67.

XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculosis; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.

XX Synthetic.

XX Key Location/Qualifiers

FT modified_base 5

FT /*tag= a

FT /mod_base= OTHER

FT /note= "c= 5-bromocytosine"

XX WO2004058159-A2.

XX 15-JUL-2004.

XX 17-DEC-2003; 2003WO-US040417.

XX 23-DEC-2002; 2002US-0436406P.

XX (DYNA-) DYNNAVX TECHNOLOGIES CORP.

XX Fearon KL;

XX WPI; 2004-561515/54.

XX New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.

XX

PS Disclosure; SEQ ID NO 67; 183pp; English.

XX

CC The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an Igs-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic bronchopulmonary aspergillosis,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.

XX SQ Sequence 10 BP; 2 A; 2 C; 2 G; 2 T; 2 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;

Best Local Similarity 66.7%; Pred. No. 2e+05;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGETCG 10

DB 2 UAACGUTCG 10

RESULT 94

ADQ95263

ID ADQ95263 standard; DNA; 10 BP.

XX ADQ95263;

XX 07-OCT-2004 (first entry)

XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 5.

XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculosis; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.

XX Synthetic.

XX WO2004058159-A2.

XX 15-JUL-2004.

XX 17-DEC-2003; 2003WO-US040417.

XX 23-DEC-2002; 2002US-0436406P.

PA (DYNA-) DYNAXVAX TECHNOLOGIES CORP.
 XX Fearon KL;
 XX WPI; 2004-561515/54.
 XX New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.
 XX
 XX Disclosure; SEQ ID NO 5; 183pp; English.
 XX
 XX The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an Igs-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 XX Sequence 10 BP; 2 A; 2 C; 3 G; 3 T; 0 U; 0 Other;
 SQ
 Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANCCKTCG 10
 Db : |||||
 2 GAACGTCG 10
 RESULT 95
 ADQ95279
 ID ADQ95279 standard; DNA; 10 BP.
 XX
 XX ADQ95279;
 XX
 XX 07-OCT-2004 (first entry)
 DT
 XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 21.
 DE
 XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculosis; Antileprotic; Antiparasitic; Antimalarial; Antitumor;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.
 XX
 XX Synthetic.

XX WO2004058159-A2.
 XX 15-JUL-2004.
 XX 17-DEC-2003; 2003WO-US040417.
 XX 23-DEC-2002; 2002US-0436406P.
 XX (DYNA-) DYNAXVAX TECHNOLOGIES CORP.
 XX Fearon KL;
 XX WPI; 2004-561515/54.
 XX New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.
 XX
 XX Disclosure; SEQ ID NO 21; 183pp; English.
 XX
 XX The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an Igs-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 XX Sequence 10 BP; 2 A; 2 C; 2 G; 2 T; 2 U; 0 Other;
 SQ
 Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANCCKTCG 10
 Db : |||||
 2 UAACGTCG 10
 RESULT 96
 ADQ95280
 ID ADQ95280 standard; DNA; 10 BP.
 XX
 XX ADQ95280;
 XX
 XX 07-OCT-2004 (first entry)
 DT
 XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 22.
 DE
 XX

KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.
 XX
 XX Synthetic.
 OS
 XX
 XX WO2004058159-A2.
 PN
 XX
 XX 15-JUL-2004.
 PD
 XX
 XX 17-DEC-2003; 2003WO-US040417.
 PF
 XX
 XX 23-DEC-2002; 2002US-0436406P.
 PR
 XX
 XX (DYNA-) DYNAXV TECHNOLOGIES CORP.
 PA
 XX
 XX Fearon KL;
 PI
 XX
 XX WPI; 2004-561515/54.
 DR
 XX
 XX New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.
 PT
 XX
 XX Disclosure; SEQ ID NO 22; 183pp; English.
 PS
 XX
 XX The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IGE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 XX Sequence 10 BP; 2 A; 2 C; 2 G; 4 T; 0 U; 0 Other;
 SQ
 Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.74; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANCGETCG 10
 Db 2 TACGGTCG 10
 RESULT 97

ADQ95316
 ID ADQ95316 standard; DNA; 10 BP.
 XX
 AC ADQ95316;
 XX
 DT 07-OCT-2004 (first entry)
 XX
 XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 58.
 DE
 XX
 XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.
 XX
 XX Synthetic.
 OS
 XX
 XX Key Location/Qualifiers
 FH modified_base 5 /*tag= a
 FT /mod_base= OTHER
 FT /note= "C= 5-bromocytosine"
 FT
 XX WO2004058159-A2.
 PN
 XX
 XX 15-JUL-2004.
 PD
 XX
 XX 17-DEC-2003; 2003WO-US040417.
 PF
 XX
 XX 23-DEC-2002; 2002US-0436406P.
 PR
 XX
 XX (DYNA-) DYNAXV TECHNOLOGIES CORP.
 PA
 XX
 XX Fearon KL;
 PI
 XX
 XX WPI; 2004-561515/54.
 DR
 XX
 XX New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.
 PT
 XX
 XX Disclosure; SEQ ID NO 58; 183pp; English.
 PS
 XX
 XX The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IGE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 XX Sequence 10 BP; 2 A; 2 C; 2 G; 4 T; 0 U; 0 Other;
 SQ

CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 SQ Sequence 10 BP; 1 A; 2 C; 4 G; 3 T; 0 U; 0 Other;
 Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANCCTCG 10
 Db 2 TATCGCTCG 10
 RESULT 98
 ADQ95324
 ID ADQ95324 standard; DNA; 10 BP.
 XX
 AC ADQ95324;
 DT 07-OCT-2004 (first entry)
 XX
 DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 66.
 XX
 KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatologic; Immunosuppressive; Cytostatic; Protozoacide; Antitumor;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW Immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 5
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "C= 5-bromocytosine"
 XX
 XX WO2004058159-A2.
 XX
 XX 15-JUL-2004.
 XX
 XX 17-DEC-2003; 2003WO-US040417.
 XX
 XX 23-DEC-2002; 2002US-0436406P.
 XX
 XX (DYNA-) DYNAX TECHNOLOGIES CORP.
 XX
 XX Fearon KL;
 XX
 XX WPI; 2004-561515/54.
 XX
 XX New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.
 XX
 XX Disclosure; SEQ ID NO 66; 183pp; English.
 XX
 XX The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the

CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an Ige-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 SQ Sequence 10 BP; 2 A; 2 C; 2 G; 3 T; 1 U; 0 Other;
 Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANCCTCG 10
 Db 2 TATCGCTCG 10
 RESULT 99
 ABQ75244
 ID ABQ75244 standard; DNA; 11 BP.
 XX
 AC ABQ75244;
 DT 05-NOV-2002 (first entry)
 XX
 DE ISS immunomodulatory oligonucleotide SEQ ID NO:116.
 XX
 KW Immunostimulatory sequence; ISS: immunomodulatory; immune response;
 KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
 KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
 KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
 KW immunoglobulin E; Ige-related disorder; antiallergic; antiasthmatic;
 KW virucide; antibacterial; protozoacide; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 2
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "5-bromocytosine"
 XX
 XX WO200252002-A2.
 XX
 XX 04-JUL-2002.
 XX
 XX 27-DEC-2001; 2001WO-US050821.
 XX
 XX 27-DEC-2000; 2000US-0258675P.
 XX
 XX (DYNA-) DYNAX TECHNOLOGIES CORP.
 XX
 XX Fearon KL; Dina D;
 XX WPI; 2002-657426/70.
 XX
 XX Immunomodulatory polynucleotide for modulating an immune response in a
 PT subject suffering from disorders associated with Th2-type immune
 PT response, e.g. allergy, or infectious disease, comprises an
 PT immunostimulatory sequence.
 XX

PS Disclosure; Page 25; 95pp; English.

XX The present invention describes an immunomodulatory polynucleotide (I) comprising an immunostimulatory sequence (ISS). Also described: (1) an immunomodulatory composition comprising (I); (2) an immunomodulatory polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a biodegradable MC, where the MC is less than 10 micrometre in size; and (3) a kit comprising (I). (I) has anti-allergic, antiasthmatic, virucide, antibacterial and protozoacide activities, and can be used as a modulator of immune response. (I) is useful for modulating an immune response in an individual suffering from disorders associated with a Th2-type immune response, especially an allergy or asthma, or an infectious disease. (I) is also useful for increasing interferon-gamma (IFN-gamma) in an individual having idiopathic pulmonary fibrosis, or IFN-alpha in an individual having a viral infection. (I) is further useful for ameliorating a symptom of an infectious disease caused by a cellular pathogen such as mycobacterial disease, malaria, leishmaniasis, toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a symptom of an immunoglobulin E (IgE)-related disorder, preferably an allergy-related disorder, in particular asthma in an individual. The present sequence represents an immunomodulatory oligonucleotide from the present invention

XX
SQ Sequence 11 BP; 1 A; 3 C; 3 G; 3 T; 0 U; 1 Other;

Query Match 68.0%; Score 6.8; DB 6; Length 11;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANGKTCG 10
: |||||
Db 3 GACCGTTCG 11

RESULT:100

ABQ75229
ID ABQ75229 standard; DNA; 11 BP.

AC ABQ75229;

XX 05-NOV-2002 (first entry)

DE ISS immunomodulatory oligonucleotide SEQ ID NO:102.

XX Immunostimulatory sequence; ISS: immunomodulatory; immune response;
KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
KW immunoglobulin E; IgE-related disorder; anti-allergic; antiasthmatic;
KW virucide; antibacterial; protozoacide; ss.

OS Synthetic.

XX WO200252002-A2.

XX 04-JUL-2002.

XX 27-DEC-2001; 2001WO-US050821.

XX 27-DEC-2000; 2000US-0258675P.

XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX Fearon KL, Dina D;

XX WPI; 2002-657426/70.

XX Immunomodulatory polynucleotide for modulating an immune response in a
PT subject suffering from disorders associated with Th2-type immune
PT response, e.g. allergy, or infectious disease, comprises an
PT immunostimulatory sequence.

XX Disclosure; Page 24; 95pp; English.

XX

CC The present invention describes an immunomodulatory polynucleotide (I) comprising an immunostimulatory sequence (ISS). Also described: (1) an immunomodulatory composition comprising (I); (2) an immunomodulatory polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a biodegradable MC, where the MC is less than 10 micrometre in size; and (3) a kit comprising (I). (I) has anti-allergic, antiasthmatic, virucide, antibacterial and protozoacide activities, and can be used as a modulator of immune response. (I) is useful for modulating an immune response in an individual suffering from disorders associated with a Th2-type immune response, especially an allergy or asthma, or an infectious disease. (I) is also useful for increasing interferon-gamma (IFN-gamma) in an individual having idiopathic pulmonary fibrosis, or IFN-alpha in an individual having a viral infection. (I) is further useful for ameliorating a symptom of an infectious disease caused by a cellular pathogen such as mycobacterial disease, malaria, leishmaniasis, toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a symptom of an immunoglobulin E (IgE)-related disorder, preferably an allergy-related disorder, in particular asthma in an individual. The present sequence represents an immunomodulatory oligonucleotide from the present invention

XX
SQ Sequence 11 BP; 2 A; 3 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 6; Length 11;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANGKTCG 10
: |||||
Db 3 GACCGTTCG 11

Search completed: June 30, 2005, 00:38:19
Job time : 221.5 secs

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GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: June 29, 2005, 23:58:44 ; Search time 70.5 Seconds
(without alignments)
232.096 Million cell updates/sec

Title: US-10-033-243-62

Perfect score: 10

Sequence: 1 ndancgkctcg 10

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 1202784 seqs, 818138359 residues

Total number of hits satisfying chosen parameters: 2405568

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 100 summaries

Database : Issued Patents NA:*

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2: /cgn2_6/prodata/1/ina/5B COMB.seq.*
3: /cgn2_6/prodata/1/ina/6A COMB.seq.*
4: /cgn2_6/prodata/1/ina/6B COMB.seq.*
5: /cgn2_6/prodata/1/ina/PCTUS COMB.seq.*
6: /cgn2_6/prodata/1/ina/backfile1.seq.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | Query Match | Length | ID | Description |
|------------|-------|-------------|--------|----|--------------------|
| 1 | 6.8 | 68.0 | 12 | 3 | US-09-054-832-6 |
| 2 | 6.8 | 68.0 | 12 | 4 | US-09-040-953-6 |
| 3 | 6.8 | 68.0 | 12 | 4 | US-09-738-444A-42 |
| 4 | 6.8 | 68.0 | 14 | 3 | US-08-954-210-13 |
| 5 | 6.8 | 68.0 | 14 | 3 | US-08-879-078B-4 |
| 6 | 6.8 | 68.0 | 14 | 3 | US-09-431-419A-13 |
| 7 | 6.8 | 68.0 | 15 | 1 | US-08-182-968A-27 |
| 8 | 6.8 | 68.0 | 15 | 1 | US-08-182-968A-331 |
| 9 | 6.8 | 68.0 | 15 | 1 | US-08-182-968A-332 |
| 10 | 6.8 | 68.0 | 15 | 2 | US-08-774-306A-27 |
| 11 | 6.8 | 68.0 | 15 | 2 | US-08-774-306A-331 |
| 12 | 6.8 | 68.0 | 15 | 2 | US-08-774-306A-332 |
| 13 | 6.8 | 68.0 | 15 | 3 | US-08-954-210-12 |
| 14 | 6.8 | 68.0 | 15 | 3 | US-09-064-156A-27 |
| 15 | 6.8 | 68.0 | 15 | 3 | US-09-064-156A-331 |
| 16 | 6.8 | 68.0 | 15 | 3 | US-09-064-156A-332 |
| 17 | 6.8 | 68.0 | 15 | 3 | US-09-206-866-5 |
| 18 | 6.8 | 68.0 | 15 | 3 | US-09-206-866-6 |
| 19 | 6.8 | 68.0 | 15 | 3 | US-09-206-866-7 |
| 20 | 6.8 | 68.0 | 15 | 3 | US-09-206-866-8 |
| 21 | 6.8 | 68.0 | 15 | 3 | US-09-206-866-9 |
| 22 | 6.8 | 68.0 | 15 | 3 | US-09-206-866-10 |
| 23 | 6.8 | 68.0 | 15 | 3 | US-09-332-319-7 |
| 24 | 6.8 | 68.0 | 15 | 3 | US-09-332-319-8 |
| 25 | 6.8 | 68.0 | 15 | 3 | US-09-332-319-9 |
| 26 | 6.8 | 68.0 | 15 | 3 | US-09-206-866A-5 |
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| 6.8 | 68.0 | 15 | 3 | US-09-206-866A-7 | Sequence 7, Appli |
| 6.8 | 68.0 | 15 | 3 | US-09-206-866A-8 | Sequence 8, Appli |
| 6.8 | 68.0 | 15 | 3 | US-09-206-866A-9 | Sequence 9, Appli |
| 6.8 | 68.0 | 15 | 3 | US-09-206-866A-10 | Sequence 10, Appli |
| 6.8 | 68.0 | 15 | 3 | US-09-257-580-9 | Sequence 9, Appli |
| 6.8 | 68.0 | 15 | 3 | US-09-431-419A-12 | Sequence 12, Appli |
| 6.8 | 68.0 | 15 | 3 | US-09-261-115-6 | Sequence 6, Appli |
| 6.8 | 68.0 | 15 | 4 | US-09-529-217-1 | Sequence 1, Appli |
| 6.8 | 68.0 | 15 | 6 | 5182195-49 | Patent No. 5182195 |
| 6.8 | 68.0 | 15 | 6 | 5182195-49 | Patent No. 5182195 |
| 6.8 | 68.0 | 16 | 3 | US-08-954-210-11 | Sequence 11, Appli |
| 6.8 | 68.0 | 16 | 3 | US-09-206-866-37 | Sequence 37, Appli |
| 6.8 | 68.0 | 16 | 3 | US-09-206-866-38 | Sequence 38, Appli |
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| 6.8 | 68.0 | 16 | 3 | US-09-206-866-40 | Sequence 40, Appli |
| 6.8 | 68.0 | 16 | 3 | US-09-206-866-41 | Sequence 41, Appli |
| 6.8 | 68.0 | 16 | 3 | US-09-206-866A-37 | Sequence 37, Appli |
| 6.8 | 68.0 | 16 | 3 | US-09-206-866A-38 | Sequence 38, Appli |
| 6.8 | 68.0 | 16 | 3 | US-09-206-866A-39 | Sequence 39, Appli |
| 6.8 | 68.0 | 16 | 3 | US-09-206-866A-40 | Sequence 40, Appli |
| 6.8 | 68.0 | 16 | 3 | US-09-206-866A-41 | Sequence 41, Appli |
| 6.8 | 68.0 | 16 | 3 | US-09-054-832-4 | Sequence 4, Appli |
| 6.8 | 68.0 | 16 | 3 | US-09-431-419A-11 | Sequence 11, Appli |
| 6.8 | 68.0 | 16 | 4 | US-09-640-953-4 | Sequence 4, Appli |
| 6.8 | 68.0 | 16 | 4 | US-09-705-400-37 | Sequence 37, Appli |
| 6.8 | 68.0 | 17 | 1 | US-08-758-306-1235 | Sequence 1235, Ap |
| 6.8 | 68.0 | 17 | 3 | US-08-954-210-71 | Sequence 71, Appli |
| 6.8 | 68.0 | 17 | 3 | US-08-999-733-9 | Sequence 9, Appli |
| 6.8 | 68.0 | 17 | 3 | US-09-206-866-20 | Sequence 20, Appli |
| 6.8 | 68.0 | 17 | 3 | US-09-206-866-21 | Sequence 21, Appli |
| 6.8 | 68.0 | 17 | 3 | US-09-206-866A-22 | Sequence 22, Appli |
| 6.8 | 68.0 | 17 | 3 | US-09-206-866A-23 | Sequence 23, Appli |
| 6.8 | 68.0 | 17 | 3 | US-09-206-866A-24 | Sequence 24, Appli |
| 6.8 | 68.0 | 17 | 3 | US-09-431-419A-71 | Sequence 71, Appli |
| 6.8 | 68.0 | 17 | 4 | US-09-469-211A-13 | Sequence 13, Appli |
| 6.8 | 68.0 | 18 | 1 | US-08-072-282-8 | Sequence 8, Appli |
| 6.8 | 68.0 | 18 | 1 | US-08-758-306-1373 | Sequence 1373, Ap |
| 6.8 | 68.0 | 18 | 2 | US-08-928-692-68 | Sequence 68, Appli |
| 6.8 | 68.0 | 18 | 2 | US-08-637-732A-22 | Sequence 22, Appli |
| 6.8 | 68.0 | 18 | 3 | US-09-339-972-68 | Sequence 68, Appli |
| 6.8 | 68.0 | 18 | 3 | US-09-157-257-14 | Sequence 14, Appli |
| 6.8 | 68.0 | 18 | 4 | US-09-728-498A-4 | Sequence 4, Appli |
| 6.8 | 68.0 | 18 | 4 | US-09-083-268-9 | Sequence 9, Appli |
| 6.8 | 68.0 | 18 | 6 | 5245022-20 | Patent No. 5245022 |
| 6.8 | 68.0 | 18 | 6 | 5245022-20 | Patent No. 5245022 |
| 6.8 | 68.0 | 19 | 1 | US-07-991-855-62 | Sequence 62, Appli |
| 6.8 | 68.0 | 19 | 1 | US-07-991-855-64 | Sequence 64, Appli |
| 6.8 | 68.0 | 19 | 3 | US-09-050-559C-16 | Sequence 16, Appli |
| 6.8 | 68.0 | 19 | 4 | US-09-216-393B-333 | Sequence 333, App |
| 6.8 | 68.0 | 19 | 4 | US-09-672-717-16 | Sequence 16, Appli |
| 6.8 | 68.0 | 19 | 4 | US-08-983-605-299 | Sequence 299, App |
| 6.8 | 68.0 | 20 | 1 | US-07-889-651-6 | Sequence 6, Appli |
| 6.8 | 68.0 | 20 | 1 | US-07-963-490-3 | Sequence 3, Appli |
| 6.8 | 68.0 | 20 | 1 | US-08-502-185-24 | Sequence 24, Appli |
| 6.8 | 68.0 | 20 | 1 | US-08-398-945-24 | Sequence 24, Appli |
| 6.8 | 68.0 | 20 | 1 | US-08-501-779-24 | Sequence 24, Appli |
| 6.8 | 68.0 | 20 | 1 | US-08-501-713-24 | Sequence 24, Appli |
| 6.8 | 68.0 | 20 | 1 | US-08-446-660-3 | Sequence 3, Appli |
| 6.8 | 68.0 | 20 | 1 | US-08-378-860-24 | Sequence 24, Appli |
| 6.8 | 68.0 | 20 | 1 | US-08-623-891-4 | Sequence 4, Appli |
| 6.8 | 68.0 | 20 | 1 | US-08-501-626-24 | Sequence 24, Appli |
| 6.8 | 68.0 | 20 | 1 | US-08-418-859-11 | Sequence 11, Appli |
| 6.8 | 68.0 | 20 | 1 | US-08-418-859-11 | Sequence 11, Appli |
| 6.8 | 68.0 | 20 | 1 | US-08-501-356-24 | Sequence 24, Appli |
| 6.8 | 68.0 | 20 | 2 | US-08-506-864A-11 | Sequence 11, Appli |
| 6.8 | 68.0 | 20 | 2 | US-08-643-181-11 | Sequence 11, Appli |
| 6.8 | 68.0 | 20 | 2 | US-08-643-181-11 | Sequence 11, Appli |
| 6.8 | 68.0 | 20 | 2 | US-08-470-426B-30 | Sequence 30, Appli |

ALIGNMENTS

RESULT 1
US-09-054-832-6
; Sequence 6, Application US/09054832
; Patent No. 6312894
; GENERAL INFORMATION:
; APPLICANT: Meyer, Rich
; TITLE OF INVENTION: IMPROVED HYBRIDIZATION AND
; TITLE OF INVENTION: MISMATCH DISCRIMINATION USING OLIGONUCLEOTIDES
; TITLE OF INVENTION: CONJUGATED TO MINOR GROOVE BINDERS
; NUMBER OF SEQUENCES: 40
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MORRISON & FOERSTER
; STREET: 755 PAGE MILL ROAD
; CITY: PALO ALTO
; STATE: CA
; COUNTRY: USA
; ZIP: 94304-1018
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; OPERATING SYSTEM: Windows
; SOFTWARE: FastSeq for Windows Version 2.0b
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/054,832
; FILING DATE: 03-APR-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Brennan, Sean M
; REGISTRATION NUMBER: 39,917
; REFERENCE/DOCKET NUMBER: 34469-20004.20
; TELEPHONE: 650-813-5600
; TELEFAX: 650-494-0792
; TELEX: 706141
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 12 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/415,370
; FILING DATE: 03-APR-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Brennan, Sean M
; REGISTRATION NUMBER: 39,917
; REFERENCE/DOCKET NUMBER: 34469-20004.20
; TELEPHONE: 650-813-5600
; TELEFAX: 650-494-0792
; TELEX: 706141
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 12 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-09-054-832-6
Query Match 68.0%; Score 6.8; DB 3; Length 12;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
; : |||: |||
Db 1AAACGTTGG 12

RESULT 2
US-09-640-953-6
; Sequence 6, Application US/09640953
; Patent No. 6492346
; GENERAL INFORMATION:
; APPLICANT: Meyer, Rich
; TITLE OF INVENTION: IMPROVED HYBRIDIZATION AND
; TITLE OF INVENTION: MISMATCH DISCRIMINATION USING OLIGONUCLEOTIDES
; CONJUGATED TO MINOR GROOVE BINDERS
; NUMBER OF SEQUENCES: 40
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MORRISON & FOERSTER
; STREET: 755 PAGE MILL ROAD
; CITY: PALO ALTO
; STATE: CA
; COUNTRY: USA
; ZIP: 94304-1018
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; OPERATING SYSTEM: Windows
; SOFTWARE: FastSeq for Windows Version 2.0b
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/054,832
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/415,370
; FILING DATE: 03-APR-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Brennan, Sean M
; REGISTRATION NUMBER: 39,917
; REFERENCE/DOCKET NUMBER: 34469-20004.20
; TELEPHONE: 650-813-5600
; TELEFAX: 650-494-0792
; TELEX: 706141
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 12 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-09-054-832-6
Query Match 68.0%; Score 6.8; DB 3; Length 12;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
; : |||: |||
Db 1AAACGTTGG 12

RESULT 3
US-09-738-444A-42/c
; Sequence 42, Application US/09738444A
; Patent No. 6660475
; GENERAL INFORMATION:
; APPLICANT: Jack, William E.
; APPLICANT: Schildkraut, Ira
; APPLICANT: Menin, Julie F.
; TITLE OF INVENTION: Use of Site-Specific Nicking Endonucleases to Create
; TITLE OF INVENTION: Single-Stranded Regions And Applications Thereof
; FILE REFERENCE: NEB-180
; CURRENT APPLICATION NUMBER: US/09/738,444A
; CURRENT FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 42
; LENGTH: 12
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Theoretical
; OTHER INFORMATION: sequence - randomly generated
US-09-738-444A-42
Query Match 68.0%; Score 6.8; DB 4; Length 12;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
; : |||: |||

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; OTHER INFORMATION: Description of Artificial Sequence:
; NAME/KEY: misc feature
; LOCATION: (14)
; OTHER INFORMATION: n stands for 3'-3' inverted thymidine
US-08-879-078B-4

Query Match      68.0%; Score 6.8; DB 3; Length 14;
Best Local Similarity 55.6%; Pred. No. 4e+04;
Matches 5; Conservative 3; Mismatches 1; Indels

QY      2 DANCCKTCG 10
        :|||:
DB      4 UACCGGUCG 12

RESULT 6
US-09-431-419A-13
; Sequence 13, Application US/09431419A
; Patent No. 6458567
; GENERAL INFORMATION:
; APPLICANT: Barber, Jack R.
; APPLICANT: Welch, Peter J.
; APPLICANT: Tritz, Richard
; APPLICANT: Yei, Soopin
; APPLICANT: Yu, Mang
; TITLE OF INVENTION: HEPATITIS C VIRUS RIBOZYMES
; FILE REFERENCE: 480124.403C3
; CURRENT APPLICATION NUMBER: US/09/431,419A
; CURRENT FILING DATE: 1999-11-01
; NUMBER OF SEQ ID NOS: 73
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 13
; LENGTH: 14
; TYPE: DNA
; ORGANISM: Hepatitis C Virus
US-09-431-419A-13

Query Match      68.0%; Score 6.8; DB 3; Length 14;
Best Local Similarity 55.6%; Pred. No. 4e+04;
Matches 5; Conservative 3; Mismatches 1; Indels

QY      2 DANCCKTCG 10
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DB      1 GAGCGGUCG 9

RESULT 7
US-08-182-968A-27
; Sequence 27, Application US/08182968A
; Patent No. 5610054
; GENERAL INFORMATION:
; APPLICANT: Draper, Kenneth G.
; TITLE OF INVENTION: METHOD AND REAGENT FOR
; TITLE OF INVENTION: INHIBITING HEPATITIS C
; TITLE OF INVENTION: VIRUS REPLICATION
; NUMBER OF SEQUENCES: 497
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lyon & Lyon
; STREET: 633 West Fifth Street
; CITY: Suite 4700
; CITY: Los Angeles
; STATE: California
; COUNTRY: U.S.A.
; ZIP: 90071-2066
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
; MEDIUM TYPE: storage
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: IBM P.C. DOS 5.0
; SOFTWARE: Word Perfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/182,968A

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; FILING DATE: 13-JANUARY-1994
; PRIOR APPLICATION NUMBER: 07/882,888
; FILING DATE: 14-MAY-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Warburg, Richard J.
; REGISTRATION NUMBER: 32,327
; REFERENCE/DOCKET NUMBER: 205/277
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 489-1600
; TELEFAX: (213) 955-0440
; TELEX: 67-3510
; INFORMATION FOR SEQ ID NO: 27:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-182-968A-27

Query Match      68.0%; Score 6.8; DB 1; Length 15;
Best Local Similarity 55.6%; Pred. No. 4e+04;
Matches 5; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
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Db      1 GAACGGUCG 9

RESULT 8
US-08-182-968A-331
; Sequence 331, Application US/08182968A
; Patent No. 5610054
; GENERAL INFORMATION:
; APPLICANT: Draper, Kenneth G.
; TITLE OF INVENTION: METHOD AND REAGENT FOR
; TITLE OF INVENTION: INHIBITING HEPATITIS C
; TITLE OF INVENTION: VIRUS REPLICATION
; NUMBER OF SEQUENCES: 497
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lyon & Lyon
; STREET: Suite 4700
; CITY: Los Angeles
; STATE: California
; COUNTRY: U.S.A.
; ZIP: 90071-2066
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: IBM P.C. DOS 5.0
; SOFTWARE: Word Perfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/182,968A
; FILING DATE: 13-JANUARY-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/882,888
; FILING DATE: 14-MAY-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Warburg, Richard J.
; REGISTRATION NUMBER: 32,327
; REFERENCE/DOCKET NUMBER: 205/277
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 489-1600
; TELEFAX: (213) 955-0440
; TELEX: 67-3510
; INFORMATION FOR SEQ ID NO: 31:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear

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US-08-182-968A-331

Query Match      68.0%; Score 6.8; DB 1; Length 15;
Best Local Similarity 55.6%; Pred. No. 4e+04;
Matches 5; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
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Db      2 UAACGGUUCG 10

RESULT 9
US-08-182-968A-332
; Sequence 332, Application US/08182968A
; Patent No. 5610054
; GENERAL INFORMATION:
; APPLICANT: Draper, Kenneth G.
; TITLE OF INVENTION: METHOD AND REAGENT FOR
; TITLE OF INVENTION: INHIBITING HEPATITIS C
; TITLE OF INVENTION: VIRUS REPLICATION
; NUMBER OF SEQUENCES: 497
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lyon & Lyon
; STREET: Suite 4700
; CITY: Los Angeles
; STATE: California
; COUNTRY: U.S.A.
; ZIP: 90071-2066
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: IBM P.C. DOS 5.0
; SOFTWARE: Word Perfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/182,968A
; FILING DATE: 13-JANUARY-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/882,888
; FILING DATE: 14-MAY-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Warburg, Richard J.
; REGISTRATION NUMBER: 32,327
; REFERENCE/DOCKET NUMBER: 205/277
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 489-1600
; TELEFAX: (213) 955-0440
; TELEX: 67-3510
; INFORMATION FOR SEQ ID NO: 332:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-182-968A-332

Query Match      68.0%; Score 6.8; DB 1; Length 15;
Best Local Similarity 55.6%; Pred. No. 4e+04;
Matches 5; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
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Db      1 UAACGGUUCG 9

RESULT 10
US-08-774-306A-27
; Sequence 27, Application US/08774306A
; Patent No. 5869253
; GENERAL INFORMATION:
; APPLICANT: Draper, Kenneth G.
; TITLE OF INVENTION: METHOD AND REAGENT FOR

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;; TITLE OF INVENTION: INHIBITING HEPATITIS C
;; TITLE OF INVENTION: VIRUS REPLICATION
;; NUMBER OF SEQUENCES: 497
;; CORRESPONDENCE ADDRESS:
;; ADDRESSEE: Lyon & Lyon
;; STREET: 633 West Fifth Street
;; CITY: Suite 4700
;; STATE: Los Angeles
;; COUNTRY: U.S.A.
;; ZIP: 90071-2066
;; COMPUTER READABLE FORM:
;; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
;; MEDIUM TYPE: storage
;; COMPUTER: IBM Compatible
;; OPERATING SYSTEM: IBM P.C. DOS 5.0
;; SOFTWARE: Word Perfect 5.1
;; CURRENT APPLICATION DATA:
;; APPLICATION NUMBER: US/08/774,306A
;; FILING DATE: December 26, 1996
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: 08/182,968
;; FILING DATE: January 13, 1994
;; APPLICATION NUMBER: 07/882,888
;; FILING DATE: May 14, 1992
;; ATTORNEY/AGENT INFORMATION:
;; NAME: Warburg, Richard J.
;; REGISTRATION NUMBER: 32,327
;; REFERENCE/DOCKET NUMBER: 223/227
;; TELEPHONE: (213) 489-1600
;; TELEFAX: (213) 955-0440
;; TELEX: 67-3510
;; INFORMATION FOR SEQ ID NO: 27:
;; SEQUENCE CHARACTERISTICS:
;; LENGTH: 15
;; TYPE: nucleic acid
;; STRANDEDNESS: single
;; TOPOLOGY: linear
US-08-774-306A-27

Query Match 68.0%; Score 6.8; DB 2; Length 15;
Best Local Similarity 55.6%; Pred. No. 4e+04;
Matches 5; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
Db 1 GAACGGUCG 9

RESULT 11
US-08-774-306A-331
; Sequence 331, Application US/08/774306A
; Patent No. 5869253
; GENERAL INFORMATION:
; APPLICANT: Draper, Kenneth G.
; TITLE OF INVENTION: METHOD AND REAGENT FOR
; TITLE OF INVENTION: INHIBITING HEPATITIS C
; NUMBER OF SEQUENCES: 497
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lyon & Lyon
; STREET: 633 West Fifth Street
; CITY: Suite 4700
; STATE: Los Angeles
; COUNTRY: U.S.A.
; ZIP: 90071-2066
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
; MEDIUM TYPE: storage
; OPERATING SYSTEM: IBM P.C. DOS 5.0

;; SOFTWARE: Word Perfect 5.1
;; CURRENT APPLICATION DATA:
;; APPLICATION NUMBER: US/08/774,306A
;; FILING DATE: December 26, 1996
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: 08/182,968
;; FILING DATE: January 13, 1994
;; APPLICATION NUMBER: 07/882,888
;; FILING DATE: May 14, 1992
;; ATTORNEY/AGENT INFORMATION:
;; NAME: Warburg, Richard J.
;; REGISTRATION NUMBER: 32,327
;; REFERENCE/DOCKET NUMBER: 223/227
;; TELEPHONE: (213) 489-1600
;; TELEFAX: (213) 955-0440
;; TELEX: 67-3510
;; INFORMATION FOR SEQ ID NO: 331:
;; SEQUENCE CHARACTERISTICS:
;; LENGTH: 15
;; TYPE: nucleic acid
;; STRANDEDNESS: single
;; TOPOLOGY: linear
US-08-774-306A-331

Query Match 68.0%; Score 6.8; DB 2; Length 15;
Best Local Similarity 55.6%; Pred. No. 4e+04;
Matches 5; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
Db 2 UAGCGUUCG 10

RESULT 12
US-08-774-306A-332
; Sequence 332, Application US/08/774306A
; Patent No. 5869253
; GENERAL INFORMATION:
; APPLICANT: Draper, Kenneth G.
; TITLE OF INVENTION: METHOD AND REAGENT FOR
; TITLE OF INVENTION: INHIBITING HEPATITIS C
; NUMBER OF SEQUENCES: 497
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lyon & Lyon
; STREET: 633 West Fifth Street
; CITY: Suite 4700
; STATE: Los Angeles
; COUNTRY: U.S.A.
; ZIP: 90071-2066
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
; MEDIUM TYPE: storage
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: IBM P.C. DOS 5.0
; SOFTWARE: Word Perfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/774,306A
; FILING DATE: December 26, 1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/182,968
; FILING DATE: January 13, 1994
; APPLICATION NUMBER: 07/882,888
; FILING DATE: May 14, 1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Warburg, Richard J.
; REGISTRATION NUMBER: 32,327
; REFERENCE/DOCKET NUMBER: 223/227
; TELEPHONE: (213) 489-1600
; TELEFAX: (213) 955-0440

; TELEX: 67-3510
; INFORMATION FOR SEQ ID NO: 332:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-774-306A-332

Query Match 68.0%; Score 6.8; DB 2; Length 15;
Best Local Similarity 55.8%; Pred. No. 4e+04;
Matches 5; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||::||
Db 1 UAGCGGUCG 9

RESULT 13
US-08-954-210-12
; Sequence 12, Application US/08954210
; Patent No. 6043077
; GENERAL INFORMATION:
; APPLICANT: Barber, Jack R.
; APPLICANT: Welch, Peter J.
; APPLICANT: Tritz, Richard
; APPLICANT: Yei, Soomin
; APPLICANT: Yu, Mang
; TITLE OF INVENTION: HEPATITIS C VIRUS RIBOZYMES
; NUMBER OF SEQUENCES: 73
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: SEED and BERRY LLP
; STREET: 6300 Columbia Center, 701 Fifth Avenue
; CITY: Seattle
; STATE: Washington
; COUNTRY: USA
; ZIP: 98104-7092
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/954,210
; FILING DATE: 20-OCT-1997
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: McMasters, David D.
; REGISTRATION NUMBER: 33,963
; REFERENCE/DOCKET NUMBER: 480124.403C1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (206) 622-4900
; TELEFAX: (206) 682-6031
; INFORMATION FOR SEQ ID NO: 12:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-954-210-12

Query Match 68.0%; Score 6.8; DB 3; Length 15;
Best Local Similarity 55.8%; Pred. No. 4e+04;
Matches 5; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||::||
Db 1 GAGCGGUCG 9

RESULT 14
US-09-064-156A-27
; Sequence 27, Application US/09064156A

; Patent No. 6132966
; GENERAL INFORMATION:
; APPLICANT: Draper, Kenneth G.
; TITLE OF INVENTION: METHOD AND REAGENT FOR
; TITLE OF INVENTION: INHIBITING HEPATITIS C
; TITLE OF INVENTION: VIRUS REPLICATION
; NUMBER OF SEQUENCES: 498
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lyon & Lyon
; STREET: 633 West Fifth Street
; CITY: Los Angeles
; STATE: California
; COUNTRY: U.S.A.
; ZIP: 90071-2066
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
; MEDIUM TYPE: storage
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: IBM P.C. DOS 5.0
; SOFTWARE: Word Perfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/064,156A
; FILING DATE: April 21, 1998
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/774,306
; FILING DATE: December 26, 1996
; APPLICATION NUMBER: 08/182,968
; FILING DATE: January 13, 1994
; APPLICATION NUMBER: 07/882,888
; FILING DATE: May 14, 1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Warburg, Richard J.
; REGISTRATION NUMBER: 32,327
; REFERENCE/DOCKET NUMBER: 234/083
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 489-1600
; TELEFAX: (213) 955-0440
; TELEX: 67-3510
; INFORMATION FOR SEQ ID NO: 27:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-09-064-156A-27

Query Match 68.0%; Score 6.8; DB 3; Length 15;
Best Local Similarity 55.6%; Pred. No. 4e+04;
Matches 5; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||::||
Db 1 GAACGGUCG 9

RESULT 15
US-09-064-156A-331
; Sequence 331, Application US/09064156A
; Patent No. 6132966
; GENERAL INFORMATION:
; APPLICANT: Draper, Kenneth G.
; TITLE OF INVENTION: METHOD AND REAGENT FOR
; TITLE OF INVENTION: INHIBITING HEPATITIS C
; TITLE OF INVENTION: VIRUS REPLICATION
; NUMBER OF SEQUENCES: 498
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lyon & Lyon
; STREET: 633 West Fifth Street
; CITY: Los Angeles
; STATE: California
; COUNTRY: U.S.A.

ZIP: 90071-2066
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM P.C. DOS 5.0
SOFTWARE: Word Perfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/064,156A
FILING DATE: April 21, 1998
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/774,306
FILING DATE: December 26, 1996
APPLICATION NUMBER: 08/182,968
FILING DATE: January 13, 1994
APPLICATION NUMBER: 07/882,888
FILING DATE: May 14, 1992
ATTORNEY/AGENT INFORMATION:
NAME: Warburg, Richard J.
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 234/083
TELEPHONE: (213) 489-1600
TELEFAX: (213) 955-0440
TELEX: 67-3510
INFORMATION FOR SEQ ID NO: 331:
SEQUENCE CHARACTERISTICS:
LENGTH: 15
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
US-09-064-156A-331

Query Match 68.0%; Score 6.8; DB 3; Length 15;
Best Local Similarity 55.6%; Pred. No. 4e+04;
Matches 5; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCGRKTCG 10
Db 2 UAGCGUUCG 10

RESULT 16
US-09-064-156A-332
Sequence 332, Application US/09064156A
Patent No. 6132966
GENERAL INFORMATION:
APPLICANT: Draper, Kenneth G.
TITLE OF INVENTION: METHOD AND REAGENT FOR
TITLE OF INVENTION: INHIBITING HEPATITIS C
TITLE OF INVENTION: VIRUS REPLICATION
NUMBER OF SEQUENCES: 498
CORRESPONDENCE ADDRESS:
ADDRESSEE: Lyon & Lyon
STREET: 633 West Fifth Street
STREET: Suite 4700
CITY: Los Angeles
STATE: California
COUNTRY: U.S.A.
ZIP: 90071-2066
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM P.C. DOS 5.0
SOFTWARE: Word Perfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/064,156A
FILING DATE: April 21, 1998
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/774,306
FILING DATE: December 26, 1996
APPLICATION NUMBER: 08/182,968

FILING DATE: January 13, 1994
APPLICATION NUMBER: 07/882,888
FILING DATE: May 14, 1992
ATTORNEY/AGENT INFORMATION:
NAME: Warburg, Richard J.
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 234/083
TELEPHONE: (213) 489-1600
TELEFAX: (213) 955-0440
TELEX: 67-3510
INFORMATION FOR SEQ ID NO: 332:
SEQUENCE CHARACTERISTICS:
LENGTH: 15
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
US-09-064-156A-332

Query Match 68.0%; Score 6.8; DB 3; Length 15;
Best Local Similarity 55.6%; Pred. No. 4e+04;
Matches 5; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCGRKTCG 10
Db 1 UAGCGUUCG 9

RESULT 17
US-09-206-866-5/c
Sequence 5, Application US/09206866A
Patent No. 6150108
GENERAL INFORMATION:
APPLICANT: SZYF, Moshe
APPLICANT: BIGEY, Pascal
TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
FILE REFERENCE: 106101.200
CURRENT APPLICATION NUMBER: US/09/206,866A
CURRENT FILING DATE: 1998-12-08
EARLIER APPLICATION NUMBER: US 08/653,954
EARLIER FILING DATE: 1996-05-22
EARLIER APPLICATION NUMBER: PCT/IB97/00879
EARLIER FILING DATE: 1997-05-22
EARLIER APPLICATION NUMBER: US 60/069,812
EARLIER FILING DATE: 1997-12-17
EARLIER APPLICATION NUMBER: US 09/194,284
EARLIER FILING DATE: 1998-11-23
NUMBER OF SEQ ID NOS: 41
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 5
LENGTH: 15
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
NAME/KEY: misc feature
LOCATION: (1)..(14)
OTHER INFORMATION: Nucleotide 14 is n wherein n = i and i = inosine.
FEATURE:
NAME/KEY: misc feature
LOCATION: (1)..(15)
OTHER INFORMATION: Nucleotides 1-15 contain c, t, a & g wherein
OTHER INFORMATION: c=cytidine; t=thymidine; a=adenosine; g=guanosine.
FEATURE:
NAME/KEY: misc feature
LOCATION: (1)..(15)
OTHER INFORMATION: m is a methyl group at the 5-position of
OTHER INFORMATION: nucleotides 1, 5 and 10 of the cytosine portion of cytidine.
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence:synthetic
OTHER INFORMATION: construct
US-09-206-866-5

Query Match 68.0%; Score 6.8; DB 3; Length 15;

; OTHER INFORMATION: m is a methyl group at the 5-position of
 ; OTHER INFORMATION: nucleotides 1, 5 and 10 of the cytosine portion of cytidine.
 ; FEATURE:
 ; OTHER INFORMATION: Description of Artificial Sequence:synthetic
 ; OTHER INFORMATION: construct
 US-09-206-866-8

Query Match 68.0%; Score 6.8; DB 3; Length 15;
 Best Local Similarity 66.7%; Pred. No. 4e+04;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
 :|||:|
 Db 9 AACGCTCG 1

RESULT 21

US-09-206-866-9/c
 ; Sequence 9, Application US/09206866A
 ; Patent No. 6150108

; GENERAL INFORMATION:
 ; APPLICANT: SZYF, Moshe
 ; APPLICANT: BIGEY, Pascal
 ; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
 ; FILE REFERENCE: 106101.200

; CURRENT APPLICATION NUMBER: US/09/206,866A

; CURRENT FILING DATE: 1998-12-08
 ; EARLIER APPLICATION NUMBER: US 08/653,954
 ; EARLIER FILING DATE: 1996-05-22
 ; EARLIER APPLICATION NUMBER: PCT/IB97/00879
 ; EARLIER FILING DATE: 1997-05-22
 ; EARLIER APPLICATION NUMBER: US 60/069,812
 ; EARLIER FILING DATE: 1997-12-17
 ; EARLIER APPLICATION NUMBER: US 09/194,284
 ; EARLIER FILING DATE: 1998-11-23

; NUMBER OF SEQ ID NOS: 41

; SOFTWARE: PatentIn Ver. 2.0

; SEQ ID NO 9

; LENGTH: 15

; TYPE: DNA

; ORGANISM: Artificial Sequence

; FEATURE:

; NAME/KEY: misc feature

; LOCATION: (1)..(14)

; OTHER INFORMATION: Nucleotide 14 is n wherein n = u and u = uridine.

; FEATURE:

; NAME/KEY: misc feature

; LOCATION: (1)..(15)

; OTHER INFORMATION: Nucleotides 1-15 contain c, t, a & g wherein

; OTHER INFORMATION: c=cytidine; t=thymidine; a=adenosine; g=guanosine;

; OTHER INFORMATION: m is a methyl group at the 5-position of

; OTHER INFORMATION: nucleotides 1 & 5 of the cytosine portion of

; OTHER INFORMATION: cytidine.

; FEATURE:

; OTHER INFORMATION: Description of Artificial Sequence:synthetic

; OTHER INFORMATION: construct

US-09-206-866-9

Query Match 68.0%; Score 6.8; DB 3; Length 15;

Best Local Similarity 66.7%; Pred. No. 4e+04;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10

:|||:|

Db 9 AACGCTCG 1

RESULT 22

US-09-206-866-10/c
 ; Sequence 10, Application US/09206866A
 ; Patent No. 6150108

; GENERAL INFORMATION:
 ; APPLICANT: SZYF, Moshe
 ; APPLICANT: BIGEY, Pascal
 ; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
 ; FILE REFERENCE: 106101.200

; CURRENT APPLICATION NUMBER: US/09/206,866A

; CURRENT FILING DATE: 1998-12-08
 ; EARLIER APPLICATION NUMBER: US 08/653,954
 ; EARLIER FILING DATE: 1996-05-22
 ; EARLIER APPLICATION NUMBER: PCT/IB97/00879
 ; EARLIER FILING DATE: 1997-05-22
 ; EARLIER APPLICATION NUMBER: US 60/069,812
 ; EARLIER FILING DATE: 1997-12-17
 ; EARLIER APPLICATION NUMBER: US 09/194,284
 ; EARLIER FILING DATE: 1998-11-23

; NUMBER OF SEQ ID NOS: 41

; SOFTWARE: PatentIn Ver. 2.0

; SEQ ID NO 9

; LENGTH: 15

; TYPE: DNA

; ORGANISM: Artificial Sequence

; FEATURE:

; NAME/KEY: misc feature

; LOCATION: (1)..(14)

; OTHER INFORMATION: Nucleotide 14 is n wherein n = u and u = uridine.

; FEATURE:

; NAME/KEY: misc feature

; LOCATION: (1)..(15)

; OTHER INFORMATION: Nucleotides 1-15 contain c, t, a & g wherein

; OTHER INFORMATION: c=cytidine; t=thymidine; a=adenosine; g=guanosine;

; OTHER INFORMATION: m is a methyl group at the 5-position of

; OTHER INFORMATION: nucleotides 1 & 5 of the cytosine portion of

; OTHER INFORMATION: cytidine.

; FEATURE:

; OTHER INFORMATION: Description of Artificial Sequence:synthetic

; OTHER INFORMATION: construct

US-09-206-866-10

Query Match 68.0%; Score 6.8; DB 3; Length 15;

Best Local Similarity 66.7%; Pred. No. 4e+04;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10

:|||:|

Db 7 TAGCGCTCG 15

:|||:|

Qy 2 DANCCKTCG 10

:|||:|

Db 7 TAGCGCTCG 15

:|||:|

Qy 2 DANCCKTCG 10

:|||:|

Db 7 TAGCGCTCG 15

:|||:|

Qy 2 DANCCKTCG 10

:|||:|

Db 7 TAGCGCTCG 15

:|||:|

Qy 2 DANCCKTCG 10

:|||:|

Db 7 TAGCGCTCG 15

:|||:|

Qy 2 DANCCKTCG 10

:|||:|

Db 7 TAGCGCTCG 15

:|||:|

Qy 2 DANCCKTCG 10

:|||:|

Db 7 TAGCGCTCG 15

:|||:|

Qy 2 DANCCKTCG 10

:|||:|

Db 7 TAGCGCTCG 15

:|||:|

Qy 2 DANCCKTCG 10

:|||:|

Db 7 TAGCGCTCG 15

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Qy 2 DANCCKTCG 10

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Db 7 TAGCGCTCG 15

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Qy 2 DANCCKTCG 10

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Db 7 TAGCGCTCG 15

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Qy 2 DANCCKTCG 10

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Db 7 TAGCGCTCG 15

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Qy 2 DANCCKTCG 10

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Qy 2 DANCCKTCG 10

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Qy 2 DANCCKTCG 10

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Db 7 TAGCGCTCG 15

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Qy 2 DANCCKTCG 10

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Db 7 TAGCGCTCG 15

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Qy 2 DANCCKTCG 10

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Db 7 TAGCGCTCG 15

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Qy 2 DANCCKTCG 10

:|||:|

Db 7 TAGCGCTCG 15

:|||:|

Qy 2 DANCCKTCG 10

:|||:|

Db 7 TAGCGCTCG 15

```
RESULT 24
US-09-332-319-8/c
; Sequence 8, Application US/09332319
; Patent No. 6171821
; GENERAL INFORMATION:
; APPLICANT: Korneluk, Robert G.
; APPLICANT: Holcik, Martin
; APPLICANT: Liston, Peter
; TITLE OF INVENTION: XIAP IRES AND USES THEREOF
; FILE REFERENCE: 07891/021002
; CURRENT APPLICATION NUMBER: US/09/332,319
; PRIOR FILING DATE: 1999-06-14
; EARLIER APPLICATION NUMBER: 09/121,979
; EARLIER FILING DATE: 1998-07-24
; NUMBER OF SEQ ID NOS: 30
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 8
; LENGTH: 15
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-332-319-8
Query Match      68.0%; Score 6.8; DB 3; Length 15;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
   :|:|:|
Db 9 TAGCGGTCG 1

RESULT 25
US-09-332-319-9/c
; Sequence 9, Application US/09332319
; Patent No. 6171821
; GENERAL INFORMATION:
; APPLICANT: Korneluk, Robert G.
; APPLICANT: Holcik, Martin
; APPLICANT: Liston, Peter
; TITLE OF INVENTION: XIAP IRES AND USES THEREOF
; FILE REFERENCE: 07891/021002
; CURRENT APPLICATION NUMBER: US/09/332,319
; CURRENT FILING DATE: 1999-06-14
; EARLIER APPLICATION NUMBER: 09/121,979
; EARLIER FILING DATE: 1998-07-24
; NUMBER OF SEQ ID NOS: 30
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 9
; LENGTH: 15
; TYPE: RNA
; ORGANISM: Homo sapiens
US-09-332-319-9
Query Match      68.0%; Score 6.8; DB 3; Length 15;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
   :|:|:|
Db 9 TAGCGGTCG 1

RESULT 26
US-09-206-866A-5/c
; Sequence 5, Application US/09206866A
; Patent No. 6268137
; GENERAL INFORMATION:
; APPLICANT: BIGEY, Pascal
; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
; FILE REFERENCE: 106101.200
US-09-206-866A-5
Query Match      68.0%; Score 6.8; DB 3; Length 15;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
   :|:|:|
Db 9 TAGCGGTCG 1

RESULT 27
US-09-206-866A-6/c
; Sequence 6, Application US/09206866A
; Patent No. 6268137
; GENERAL INFORMATION:
; APPLICANT: BIGEY, Pascal
; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
; FILE REFERENCE: 106101.200
US-09-206-866A-6
Query Match      68.0%; Score 6.8; DB 3; Length 15;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
   :|:|:|
Db 9 AACGTCG 1

US-09-206-866A-5
; CURRENT APPLICATION NUMBER: US/09/206,866A
; CURRENT FILING DATE: 1998-12-08
; PRIOR APPLICATION NUMBER: US 08/653,954
; PRIOR FILING DATE: 1996-05-22
; PRIOR APPLICATION NUMBER: PCT/IB97/00879
; PRIOR FILING DATE: 1997-05-22
; PRIOR APPLICATION NUMBER: US 60/069,812
; PRIOR FILING DATE: 1997-12-17
; PRIOR APPLICATION NUMBER: US 09/194,284
; PRIOR FILING DATE: 1998-11-23
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 5
; LENGTH: 15
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(14)
; OTHER INFORMATION: Nucleotide 14 is n wherein n = i and i = inosine.
; NAME/KEY: misc_feature
; LOCATION: (1)..(15)
; OTHER INFORMATION: Nucleotides 1-15 contain c, t, a & g wherein
; NAME/KEY: misc_feature
; LOCATION: (1)..(15)
; OTHER INFORMATION: c=cytidine; t=thymidine; a=adenosine; g=guanosine.
; OTHER INFORMATION: m is a methyl group at the 5-position of
; nucleotides 1, 5 and 10 of the cytosine portion of cytidine.
; OTHER INFORMATION: Description of Artificial Sequence:synthetic
; OTHER INFORMATION: construct
US-09-206-866A-5
```

; OTHER INFORMATION: c-cytidine; t-thymidine; a=adenosine; g=guanosine;
; OTHER INFORMATION: m is a methyl group at the 5-position of
; OTHER INFORMATION: nucleotides 1 & 5 of the cytosine portion of
; OTHER INFORMATION: cytidine.
; OTHER INFORMATION: Description of Artificial Sequence:synthetic
; OTHER INFORMATION: construct
US-09-206-866A-6

Query Match 69.0%; Score 6.8; DB 3; Length 15;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||:|
Db 9 AAACGTTTCG 1

RESULT 28

US-09-206-866A-7/c
; Sequence 7, Application US/09206866A
; Patent No. 6268137
; GENERAL INFORMATION:
; APPLICANT: BIGEY, Moshe
; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
; FILE REFERENCE: 106101.200
; CURRENT APPLICATION NUMBER: US/09/206,866A
; PRIOR FILING DATE: 1998-12-08
; PRIOR APPLICATION NUMBER: US 08/653,954
; PRIOR FILING DATE: 1996-05-22
; PRIOR APPLICATION NUMBER: PCT/IB97/00879
; PRIOR FILING DATE: 1997-05-22
; PRIOR APPLICATION NUMBER: US 60/069,812
; PRIOR FILING DATE: 1997-12-17
; PRIOR APPLICATION NUMBER: US 09/194,284
; PRIOR FILING DATE: 1998-11-23
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 7
; LENGTH: 15
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(14)
; OTHER INFORMATION: Nucleotide 14 is n wherein n = i and i = inosine.
; NAME/KEY: misc_feature
; LOCATION: (1)..(15)
; OTHER INFORMATION: Nucleotides 1-15 contain c, t, a & g wherein
; OTHER INFORMATION: c-cytidine; t-thymidine; a=adenosine; g=guanosine;
; OTHER INFORMATION: m is a methyl group at the 5-position of
; OTHER INFORMATION: cytidine.
; OTHER INFORMATION: Description of Artificial Sequence:synthetic
; OTHER INFORMATION: construct
US-09-206-866A-7

Query Match 68.0%; Score 6.8; DB 3; Length 15;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||:|
Db 9 AAACGTTTCG 1

RESULT 29

US-09-206-866A-8/c
; Sequence 8, Application US/09206866A
; Patent No. 6268137
; GENERAL INFORMATION:
; APPLICANT: BIGEY, Moshe
; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE

; FILE REFERENCE: 106101.200
; CURRENT APPLICATION NUMBER: US/09/206,866A
; CURRENT FILING DATE: 1998-12-08
; PRIOR APPLICATION NUMBER: US 08/653,954
; PRIOR FILING DATE: 1996-05-22
; PRIOR APPLICATION NUMBER: PCT/IB97/00879
; PRIOR FILING DATE: 1997-05-22
; PRIOR APPLICATION NUMBER: US 60/069,812
; PRIOR FILING DATE: 1997-12-17
; PRIOR APPLICATION NUMBER: US 09/194,284
; PRIOR FILING DATE: 1998-11-23
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 8
; LENGTH: 15
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(14)
; OTHER INFORMATION: Nucleotide 14 is n wherein n = u and u = uridine.
; NAME/KEY: misc_feature
; LOCATION: (1)..(15)
; OTHER INFORMATION: Nucleotides 1-15 contain c, t, a & g wherein
; OTHER INFORMATION: c-cytidine; t-thymidine; a=adenosine; g=guanosine.
; NAME/KEY: misc_feature
; LOCATION: (1)..(15)
; OTHER INFORMATION: m is a methyl group at the 5-position of
; OTHER INFORMATION: nucleotides 1, 5 and 10 of the cytosine portion of cytidine.
; OTHER INFORMATION: Description of Artificial Sequence:synthetic
; OTHER INFORMATION: construct
US-09-206-866A-8

Query Match 68.0%; Score 6.8; DB 3; Length 15;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||:|
Db 9 AAACGTTTCG 1

RESULT 30

US-09-206-866A-9/c
; Sequence 9, Application US/09206866A
; Patent No. 6268137
; GENERAL INFORMATION:
; APPLICANT: BIGEY, Moshe
; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
; FILE REFERENCE: 106101.200
; CURRENT APPLICATION NUMBER: US/09/206,866A
; CURRENT FILING DATE: 1998-12-08
; PRIOR APPLICATION NUMBER: US 08/653,954
; PRIOR FILING DATE: 1996-05-22
; PRIOR APPLICATION NUMBER: PCT/IB97/00879
; PRIOR FILING DATE: 1997-05-22
; PRIOR APPLICATION NUMBER: US 60/069,812
; PRIOR FILING DATE: 1997-12-17
; PRIOR APPLICATION NUMBER: US 09/194,284
; PRIOR FILING DATE: 1998-11-23
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 9
; LENGTH: 15
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(14)
; OTHER INFORMATION: Nucleotide 14 is n wherein n = u and u = uridine.
; NAME/KEY: misc_feature
; LOCATION: (1)..(15)

; OTHER INFORMATION: Nucleotides 1-15 contain c, t, a & g wherein
; OTHER INFORMATION: c-cytidine; t-thymidine; a-adenosine; g-guanosine;
; OTHER INFORMATION: m is a methyl group at the 5-position of
; OTHER INFORMATION: nucleotides 1 & 5 of the cytosine portion of
; OTHER INFORMATION: cytidine.
; OTHER INFORMATION: Description of Artificial Sequence:synthetic
; OTHER INFORMATION: construct
US-09-206-866A-9

Query Match 68.0%; Score 6.8; DB 3; Length 15;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||||
Db 9 AAACGTCG 1

RESULT 31
US-09-206-866A-10/c
; Sequence 10, Application US/09206866A
; Patent No. 6268137
; GENERAL INFORMATION:
; APPLICANT: SZYF, Moshe
; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
; FILE REFERENCE: 106101.200
; CURRENT APPLICATION NUMBER: US/09/206,866A
; PRIOR FILING DATE: 1998-12-08
; PRIOR APPLICATION NUMBER: US 08/653,954
; PRIOR FILING DATE: 1996-05-22
; PRIOR APPLICATION NUMBER: PCT/IB97/00879
; PRIOR FILING DATE: 1997-05-22
; PRIOR APPLICATION NUMBER: US 60/069,812
; PRIOR FILING DATE: 1997-12-17
; PRIOR APPLICATION NUMBER: US 09/194,284
; PRIOR FILING DATE: 1998-11-23
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 10
; LENGTH: 15
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(14)
; OTHER INFORMATION: Nucleotide 14 is n wherein n = u and u = uridine.
; NAME/KEY: misc feature
; LOCATION: (1)..(15)
; OTHER INFORMATION: Nucleotides 1-15 contain c, t, a & g wherein
; OTHER INFORMATION: c-cytidine; t-thymidine; a-adenosine; g-guanosine;
; OTHER INFORMATION: m is a methyl group at the 5-position of
; OTHER INFORMATION: nucleotide 1 of the cytosine portion of cytidine.
; OTHER INFORMATION: Description of Artificial Sequence:synthetic
; OTHER INFORMATION: construct
US-09-206-866A-10

Query Match 68.0%; Score 6.8; DB 3; Length 15;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||||
Db 9 AAACGTCG 1

RESULT 32
US-09-257-580-9
; Sequence 9, Application US/09257580
; Patent No. 6307036
; GENERAL INFORMATION:
; APPLICANT: Yorkshire Cancer Research
; TITLE OF INVENTION: Tumour Suppressor Gene

; FILE REFERENCE: Canine p53
; CURRENT APPLICATION NUMBER: US/09/257,580
; CURRENT FILING DATE: 1999-02-25
; PRIOR APPLICATION NUMBER: 9804178.3
; PRIOR FILING DATE: 1998-02-28
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 9
; LENGTH: 15
; TYPE: DNA
; ORGANISM: canis
US-09-257-580-9

Query Match 68.0%; Score 6.8; DB 3; Length 15;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||||
Db 5 AACCGTCG 13

RESULT 33
US-09-431-419A-12
; Sequence 12, Application US/09431419A
; Patent No. 6458567
; GENERAL INFORMATION:
; APPLICANT: Barber, Jack R.
; APPLICANT: Welch, Peter J.
; APPLICANT: Tritz, Richard
; APPLICANT: Yei, Soonpin
; APPLICANT: Yu, Mang
; TITLE OF INVENTION: HEPATITIS C VIRUS RIBOZYMES
; FILE REFERENCE: 480124.403C3
; CURRENT APPLICATION NUMBER: US/09/431,419A
; CURRENT FILING DATE: 1999-11-01
; NUMBER OF SEQ ID NOS: 73
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 12
; LENGTH: 15
; TYPE: DNA
; ORGANISM: Hepatitis C Virus
US-09-431-419A-12

Query Match 68.0%; Score 6.8; DB 3; Length 15;
Best Local Similarity 55.6%; Pred. No. 4e+04;
Matches 5; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||||
Db 1 GAGCGGUCG 9

RESULT 34
US-09-261-115-6/c
; Sequence 6, Application US/09261115
; Patent No. 6458584
; GENERAL INFORMATION:
; APPLICANT: MIRZABEKOV, ANDREI
; APPLICANT: GUSCHIN, DMITRY Y.
; APPLICANT: SHIK, VALENTINE
; APPLICANT: DROBYSHEV, ALEKSEI
; APPLICANT: FOTIN, ALEXANDER
; APPLICANT: YERSHOV, GENNADIY
; APPLICANT: LYSOV, YU
; TITLE OF INVENTION: CUSTOMIZED OLIGONUCLEOTIDE MICROCHIPS THAT CONVERT
; TITLE OF INVENTION: MULTIPLE GENETIC INFORMATION TO SIMPLE PATTERNS, ARE
; FILE REFERENCE: 21416/90184
; CURRENT APPLICATION NUMBER: US/09/261,115
; CURRENT FILING DATE: 1999-03-03
; NUMBER OF SEQ ID NOS: 78
; SOFTWARE: Patentin Ver. 2.1

; SEQ ID NO 6
; LENGTH: 15
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Customized
US-09-261-115-6

Query Match 68.0%; Score 6.8; DB 3; Length 15;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||||
Db 11 GACCGGTCG 3

RESULT 35
US-09-529-217-1/c
; Sequence 1, Application US/09529217
; Patent No. 6808879
; GENERAL INFORMATION:
; APPLICANT: SUEZ LYONNAISE DES EAUX
; TITLE OF INVENTION: NORTHWESTERN UNIVERSITY
; TITLE OF INVENTION: Means for qualitative and quantitative analysis of
; FILE REFERENCE: CP/FP/VB 59172
; CURRENT APPLICATION NUMBER: US/09/529,217
; CURRENT FILING DATE: 2000-06-05
; EARLIER FILING DATE: 1997-10-08
; NUMBER OF SEQ ID NOS: 4
; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 1
; LENGTH: 15
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence : primer_bind
; Patent No. 6808879
US-09-529-217-1

Query Match 68.0%; Score 6.8; DB 4; Length 15;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||||
Db 11 GACCGGTCG 3

RESULT 36
5182195-49
; Patent No. 5182195
; APPLICANT: NAKAHAMA, KAZUO; KAISHO, YOSHIHIKO; YOSHIMURA, KOJI
; TITLE OF INVENTION: METHOD FOR INCREASING USING PROTEASE
; DEFICIENT YEASTS
; NUMBER OF SEQUENCES: 71
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/269,140
; FILING DATE: 09-NOV-1988
; SEQ ID NO: 49;
; LENGTH: 15
5182195-49

Query Match 68.0%; Score 6.8; DB 6; Length 15;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||||
Db 2 GACCGGTCG 10

RESULT 37
5182195-49
; Patent No. 5182195
; APPLICANT: NAKAHAMA, KAZUO; KAISHO, YOSHIHIKO; YOSHIMURA, KOJI
; TITLE OF INVENTION: METHOD FOR INCREASING USING PROTEASE
; DEFICIENT YEASTS
; NUMBER OF SEQUENCES: 71
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/269,140
; FILING DATE: 09-NOV-1988
; SEQ ID NO: 49;
; LENGTH: 15
5182195-49

Query Match 68.0%; Score 6.8; DB 6; Length 15;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||||
Db 2 GACCGGTCG 10

RESULT 38
US-08-954-210-11
; Sequence 11, Application US/08954210
; Patent No. 6043077
; GENERAL INFORMATION:
; APPLICANT: Barber, Jack R.
; APPLICANT: Welch, Peter J.
; APPLICANT: Tritz, Richard
; APPLICANT: Yei, Soompin
; APPLICANT: Yu, Mang
; TITLE OF INVENTION: HEPATITIS C VIRUS RIBOZYMES
; NUMBER OF SEQUENCES: 73
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: SEED and BERRY LLP
; STREET: 6300 Columbia Center, 701 Fifth Avenue
; CITY: Seattle
; STATE: Washington
; COUNTRY: USA
; ZIP: 98104-7092
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/954,210
; FILING DATE: 20-OCT-1997
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Mcmasters, David D.
; REGISTRATION NUMBER: 33,963
; REFERENCE/DOCKET NUMBER: 480124.403C1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (206) 622-4900
; TELEFAX: (206) 682-6031
; INFORMATION FOR SEQ ID NO: 11:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 16 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-954-210-11

Query Match 68.0%; Score 6.8; DB 3; Length 16;
Best Local Similarity 55.6%; Pred. No. 4e+04;
Matches 5; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

Db 1 GAGCGGUC 9
:| |::||

RESULT 39
US-09-206-866-37/c
; Sequence 37, Application US/09206866A
; Patent No. 6150108
; GENERAL INFORMATION:
; APPLICANT: SZYP, Moshe
; APPLICANT: BIGEY, Pascal
; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
; FILE REFERENCE: 106101.200
; CURRENT APPLICATION NUMBER: US/09/206,866A
; CURRENT FILING DATE: 1998-12-08
; EARLIER APPLICATION NUMBER: US 08/653,954
; EARLIER FILING DATE: 1996-05-22
; EARLIER APPLICATION NUMBER: PCT/IB97/00879
; EARLIER FILING DATE: 1997-05-22
; EARLIER APPLICATION NUMBER: US 60/069,812
; EARLIER FILING DATE: 1997-12-17
; EARLIER APPLICATION NUMBER: US 09/194,284
; EARLIER FILING DATE: 1998-11-23
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 37
; LENGTH: 16
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(16)
; OTHER INFORMATION: Nucleotides 1-16 contain c, t, a & g wherein
; OTHER INFORMATION: c-cytidine; t-thymidine; a-adenosine; g-guanosine;
; OTHER INFORMATION: m is a methyl group at the 5-position of
; OTHER INFORMATION: nucleotides 1 & 5 of the cytosine position of
; OTHER INFORMATION: cytidine.
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(15)
; OTHER INFORMATION: Nucleotide 15 is n wherein n = i and i = inosine.
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:synthetic
; OTHER INFORMATION: construct
US-09-206-866-37

Query Match 68.0%; Score 6.8; DB 3; Length 16;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGRKTCG 10
:| |::||

Db 9 AAACGTTTCG 1
:| |::||

RESULT 40
US-09-206-866-38/c
; Sequence 38, Application US/09206866A
; Patent No. 6150108
; GENERAL INFORMATION:
; APPLICANT: SZYP, Moshe
; APPLICANT: BIGEY, Pascal
; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
; FILE REFERENCE: 106101.200
; CURRENT APPLICATION NUMBER: US/09/206,866A
; CURRENT FILING DATE: 1998-12-08
; EARLIER APPLICATION NUMBER: US 08/653,954
; EARLIER FILING DATE: 1996-05-22
; EARLIER APPLICATION NUMBER: PCT/IB97/00879
; EARLIER FILING DATE: 1997-05-22
; EARLIER APPLICATION NUMBER: US 60/069,812
; EARLIER FILING DATE: 1997-12-17
; EARLIER APPLICATION NUMBER: US 09/194,284
; EARLIER FILING DATE: 1998-11-23
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 38

LENGTH: 16
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(16)
; OTHER INFORMATION: Nucleotides 1-16 contain c, t, a & g wherein
; OTHER INFORMATION: c-cytidine; t-thymidine; a-adenosine; g-guanosine;
; OTHER INFORMATION: m is a methyl group at the 5-position of
; OTHER INFORMATION: nucleotides 1 & 5 of the cytosine portion of
; OTHER INFORMATION: cytidine.
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(15)
; OTHER INFORMATION: Nucleotide 15 is n wherein n = i and i = inosine.
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:synthetic
; OTHER INFORMATION: construct
US-09-206-866-38

Query Match 68.0%; Score 6.8; DB 3; Length 16;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGRKTCG 10
:| |::||

Db 9 AAACGTTTCG 1
:| |::||

RESULT 41
US-09-206-866-39/c
; Sequence 39, Application US/09206866A
; Patent No. 6150108
; GENERAL INFORMATION:
; APPLICANT: SZYP, Moshe
; APPLICANT: BIGEY, Pascal
; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
; FILE REFERENCE: 106101.200
; CURRENT APPLICATION NUMBER: US/09/206,866A
; CURRENT FILING DATE: 1998-12-08
; EARLIER APPLICATION NUMBER: US 08/653,954
; EARLIER FILING DATE: 1996-05-22
; EARLIER APPLICATION NUMBER: PCT/IB97/00879
; EARLIER FILING DATE: 1997-05-22
; EARLIER APPLICATION NUMBER: US 60/069,812
; EARLIER FILING DATE: 1997-12-17
; EARLIER APPLICATION NUMBER: US 09/194,284
; EARLIER FILING DATE: 1998-11-23
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 39
; LENGTH: 16
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(16)
; OTHER INFORMATION: Nucleotides 1-16 contain c, t, a & g wherein
; OTHER INFORMATION: c-cytidine; t-thymidine; a-adenosine; g-guanosine;
; OTHER INFORMATION: m is a methyl group at the 5-position of
; OTHER INFORMATION: nucleotides 1 & 5 of the cytosine portion of
; OTHER INFORMATION: cytidine.
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(15)
; OTHER INFORMATION: Nucleotide 15 is n wherein n = u and u = uridine.
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:synthetic
; OTHER INFORMATION: construct
US-09-206-866-39

Query Match 68.0%; Score 6.8; DB 3; Length 16;
Best Local Similarity 66.7%; Pred. No. 4e+04;

US-09-206-866A-37

Query Match 68.0%; Score 6.8; DB 3; Length 16;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

: |||:|

Db 9 AAACGTTTCG 1

RESULT 45

US-09-206-866A-38/c
; Sequence 38, Application US/09206866A
; Patent No. 6268137
; GENERAL INFORMATION:
; APPLICANT: SZYF, Moshe
; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
; FILE REFERENCE: 106101.200
; CURRENT APPLICATION NUMBER: US/09/206,866A
; PRIOR FILING DATE: 1998-12-08
; PRIOR APPLICATION NUMBER: US 08/653,954
; PRIOR FILING DATE: 1996-05-22
; PRIOR APPLICATION NUMBER: PCT/IB97/00879
; PRIOR FILING DATE: 1997-05-22
; PRIOR APPLICATION NUMBER: US 60/069,812
; PRIOR FILING DATE: 1997-12-17
; PRIOR APPLICATION NUMBER: US 09/194,284
; PRIOR FILING DATE: 1998-11-23
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 38
; LENGTH: 16
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(16)
; OTHER INFORMATION: Nucleotides 1-16 contain c, t, a & g wherein
; OTHER INFORMATION: c=cytidine; t=thymidine; a=adenosine; g=guanosine;
; OTHER INFORMATION: m is a methyl group at the 5-position of
; OTHER INFORMATION: nucleotides 1 & 5 of the cytosine portion of
; OTHER INFORMATION: cytidine.
; NAME/KEY: misc feature
; LOCATION: (1)..(15)
; OTHER INFORMATION: Nucleotide 15 is n wherein n = i and i = inosine.
; OTHER INFORMATION: Description of Artificial Sequence:synthetic
; OTHER INFORMATION: construct
US-09-206-866A-38

Query Match 68.0%; Score 6.8; DB 3; Length 16;

Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

: |||:|

Db 9 AAACGTTTCG 1

RESULT 46

US-09-206-866A-39/c
; Sequence 39, Application US/09206866A
; Patent No. 6268137
; GENERAL INFORMATION:
; APPLICANT: SZYF, Moshe
; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
; FILE REFERENCE: 106101.200
; CURRENT APPLICATION NUMBER: US/09/206,866A
; PRIOR FILING DATE: 1998-12-08
; PRIOR APPLICATION NUMBER: US 08/653,954
; PRIOR FILING DATE: 1996-05-22

; PRIOR APPLICATION NUMBER: PCT/IB97/00879
; PRIOR FILING DATE: 1997-05-22
; PRIOR APPLICATION NUMBER: US 60/069,812
; PRIOR FILING DATE: 1997-12-17
; PRIOR APPLICATION NUMBER: US 09/194,284
; PRIOR FILING DATE: 1998-11-23
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 39
; LENGTH: 16
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(16)
; OTHER INFORMATION: Nucleotides 1-16 contain c, t, a & g wherein
; OTHER INFORMATION: c=cytidine; t=thymidine; a=adenosine; g=guanosine;
; OTHER INFORMATION: m is a methyl group at the 5-position of
; OTHER INFORMATION: nucleotides 1 & 5 of the cytosine portion of
; OTHER INFORMATION: cytidine.
; NAME/KEY: misc feature
; LOCATION: (1)..(15)
; OTHER INFORMATION: Nucleotide 15 is n wherein n = u and u = uridine.
; OTHER INFORMATION: Description of Artificial Sequence:synthetic
; OTHER INFORMATION: construct
US-09-206-866A-39

Query Match 68.0%; Score 6.8; DB 3; Length 16;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

: |||:|

Db 9 AAACGTTTCG 1

RESULT 47

US-09-206-866A-40/c
; Sequence 40, Application US/09206866A
; Patent No. 6268137
; GENERAL INFORMATION:
; APPLICANT: SZYF, Moshe
; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
; FILE REFERENCE: 106101.200
; CURRENT APPLICATION NUMBER: US/09/206,866A
; PRIOR FILING DATE: 1998-12-08
; PRIOR APPLICATION NUMBER: US 08/653,954
; PRIOR FILING DATE: 1996-05-22
; PRIOR APPLICATION NUMBER: PCT/IB97/00879
; PRIOR FILING DATE: 1997-05-22
; PRIOR APPLICATION NUMBER: US 60/069,812
; PRIOR FILING DATE: 1997-12-17
; PRIOR APPLICATION NUMBER: US 09/194,284
; PRIOR FILING DATE: 1998-11-23
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 40
; LENGTH: 16
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(16)
; OTHER INFORMATION: Nucleotides 1-16 contain c, t, a & g wherein
; OTHER INFORMATION: c=cytidine; t=thymidine; a=adenosine; g=guanosine;
; OTHER INFORMATION: m is a methyl group at the 5-position of
; OTHER INFORMATION: nucleotides 1 & 5 of the cytosine portion of
; OTHER INFORMATION: cytidine.
; NAME/KEY: misc feature
; LOCATION: (1)..(15)
; OTHER INFORMATION: Nucleotide 15 is n wherein n = f and f =
; OTHER INFORMATION: 5-fluorocytosine.

; OTHER INFORMATION: Description of Artificial Sequence:synthetic
; OTHER INFORMATION: construct
US-09-206-866A-40

Query Match 68.0%; Score 6.8; DB 3; Length 16;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||:|
DB 9 AAACGTCG 1

RESULT 48

US-09-206-866A-41/c
; Sequence 41, Application US/09206866A
; Patent No. 6268137
; GENERAL INFORMATION:
; APPLICANT: SZYP, Moshe
; APPLICANT: BIGEY, Pascal
; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
; FILE REFERENCE: 106101.200
; CURRENT APPLICATION NUMBER: US/09/206,866A
; CURRENT FILING DATE: 1998-12-08
; PRIOR APPLICATION NUMBER: US 08/653,954
; PRIOR FILING DATE: 1996-05-22
; PRIOR APPLICATION NUMBER: PCT/IB97/00879
; PRIOR FILING DATE: 1997-05-22
; PRIOR APPLICATION NUMBER: US 60/069,812
; PRIOR FILING DATE: 1997-12-17
; PRIOR APPLICATION NUMBER: US 09/194,284
; PRIOR FILING DATE: 1998-11-23
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 41
; LENGTH: 16
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(16)
; OTHER INFORMATION: Nucleotides 1-16 contain c, t, a & g wherein
; OTHER INFORMATION: c=cytidine; t=thymidine; a=adenosine; g=guanosine;
; OTHER INFORMATION: m is a methyl group at the 5-position of
; OTHER INFORMATION: nucleotides 1 & 5 of the cytosine portion of
; OTHER INFORMATION: cytidine.
; NAME/KEY: misc feature
; LOCATION: (1)..(15)
; OTHER INFORMATION: Nucleotide 15 is n wherein n = b and b = cytosine, inosine,
; OTHER INFORMATION: uridine, 5-bromocytidine or 5-fluorouridine.
; OTHER INFORMATION: Description of Artificial Sequence:synthetic
; OTHER INFORMATION: construct
US-09-206-866A-41

Query Match 68.0%; Score 6.8; DB 3; Length 16;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||:|
DB 9 AAACGTCG 1

RESULT 49

US-09-054-832-4
; Sequence 4, Application US/09054832
; Patent No. 6312894
; GENERAL INFORMATION:
; APPLICANT: Meyer, Rich
; TITLE OF INVENTION: IMPROVED HYBRIDIZATION AND
; TITLE OF INVENTION: MISMATCH DISCRIMINATION USING OLIGONUCLEOTIDES
; TITLE OF INVENTION: CONJUGATED TO MINOR GROOVE BINDERS
; NUMBER OF SEQUENCES: 40

; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MORRISON & FOERSTER
; STREET: 755 PAGE MILL ROAD
; CITY: PALO ALTO
; STATE: CA
; COUNTRY: USA
; ZIP: 94304-1018
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows
; SOFTWARE: FastSEQ for Windows Version 2.0b
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/054,832
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/415,370
; FILING DATE: 03-APR-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Brennan, Sean M
; REGISTRATION NUMBER: 39,917
; REFERENCE/DOCKET NUMBER: 34469-20004.20
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650-813-5600
; TELEFAX: 650-494-0792
; TELEX: 706141
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 16 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-09-054-832-4

Query Match 68.0%; Score 6.8; DB 3; Length 16;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||:|
DB 4 TAACGTCG 12

RESULT 50

US-09-431-419A-11
; Sequence 11, Application US/09431419A
; Patent No. 6458567
; GENERAL INFORMATION:
; APPLICANT: Barber, Jack R.
; APPLICANT: Welch, Peter J.
; APPLICANT: Tritz, Richard
; APPLICANT: Ye, Soonpin
; APPLICANT: Yu, Mang
; TITLE OF INVENTION: HEPATITIS C VIRUS RIBOZYMES
; FILE REFERENCE: 480124.403C3
; CURRENT APPLICATION NUMBER: US/09/431,419A
; CURRENT FILING DATE: 1999-11-01
; NUMBER OF SEQ ID NOS: 73
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 11
; LENGTH: 16
; TYPE: DNA
; ORGANISM: Hepatitis C Virus
US-09-431-419A-11

Query Match 68.0%; Score 6.8; DB 3; Length 16;
Best Local Similarity 55.6%; Pred. No. 4e+04;
Matches 5; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||:|
DB 1 GAGCGGUCG 9

RESULT 51
US-09-640-953-4
; Sequence 4, Application US/09640953
; Patent No. 6492346
; GENERAL INFORMATION:
; APPLICANT: Meyer, Rich
; TITLE OF INVENTION: IMPROVED HYBRIDIZATION AND
; MISMATCH DISCRIMINATION USING OLIGONUCLEOTIDES
; CONJUGATED TO MINOR GROOVE BINDERS
; NUMBER OF SEQUENCES: 40
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MORRISON & FOERSTER
; STREET: 755 PAGE MILL ROAD
; CITY: PALO ALTO
; STATE: CA
; COUNTRY: USA
; ZIP: 94304-1018
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows
; SOFTWARE: FastSeq for Windows Version 2.0b
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/640,953
; FILING DATE: 16-Aug-2000
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/054,832
; FILING DATE: 03-APR-1998
; APPLICATION NUMBER: 08/415,370
; FILING DATE: 03-APR-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Brennan, Sean M.
; REGISTRATION NUMBER: 39,917
; REFERENCE/DOCKET NUMBER: 34469-20004.20
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650-813-5600
; TELEFAX: 650-494-0792
; TELEX: 706141
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 16 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-09-640-953-4

Query Match 68.0%; Score 6.8; DB 4; Length 16;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||: |||
Db 4 TATCGTTCG 12

RESULT 52
US-09-705-400-37
; Sequence 37, Application US/09705400
; Patent No. 6692954
; GENERAL INFORMATION:
; APPLICANT: Ghazal, Peter
; TITLE OF INVENTION: Generation of Human Cytomegalovirus Yeast Artificial Chromosome
; TITLE OF INVENTION: Recombinants
; FILE REFERENCE: 98,299
; CURRENT APPLICATION NUMBER: US/09/705,400
; CURRENT FILING DATE: 2000-11-03
; NUMBER OF SEQ ID NOS: 64
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 37

; LENGTH: 16
; TYPE: DNA
; ORGANISM: Human cytomegalovirus
US-09-705-400-37

Query Match 68.0%; Score 6.8; DB 4; Length 16;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||: |||
Db 1 TATCGTTCG 9

RESULT 53
US-08-758-306-1235
; Sequence 1235, Application US/08758306
; Patent No. 5807743
; GENERAL INFORMATION:
; APPLICANT: Stinchcomb, Dan T.
; APPLICANT: McSwiggen, James A.
; TITLE OF INVENTION: METHOD AND REAGENT FOR THE
; TITILE OF INVENTION: TREATMENT OF DISEASES
; TITLE OF INVENTION: ASSOCIATED WITH
; TITLE OF INVENTION: INTERLEUKIN-2 RECEPTOR
; TITLE OF INVENTION: GAMMA-CHAIN EXPRESSION
; NUMBER OF SEQUENCES: 1379
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lyon & Lyon
; STREET: 633 West Fifth Street
; CITY: Suite 4700
; CITY: Los Angeles
; STATE: California
; COUNTRY: U.S.A.
; ZIP: 90071-2066
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
; MEDIUM TYPE: storage
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: IBM P.C. DOS 5.0
; SOFTWARE: FastSeq Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/758,306
; FILING DATE: December 3, 1996
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Warburg, Richard J.
; REGISTRATION NUMBER: 32,327
; REFERENCE/DOCKET NUMBER: 212/132
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 489-1600
; TELEFAX: (213) 955-0440
; TELEX: 67-3510
; INFORMATION FOR SEQ ID NO: 1235:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 17 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-758-306-1235

Query Match 68.0%; Score 6.8; DB 1; Length 17;
Best Local Similarity 55.6%; Pred. No. 4e+04;
Matches 5; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||: |||
Db 2 GAACGGUCG 10

```

1 OPERATING SYSTEM: PC-DOS/MS-DOS
2 SOFTWARE: PatentIn Release #1.0, Version #1.30
3 CURRENT APPLICATION DATA:
4 APPLICATION NUMBER: US/08/999,733
5 FILING DATE: 02-SEP-1997
6 CLASSIFICATION: 435
7 PRIOR APPLICATION DATA:
8 APPLICATION NUMBER: US 08/459,041
9 FILING DATE: 02-JUN-1995
10 PRIOR APPLICATION DATA:
11 APPLICATION NUMBER: US 08/093,453
12 FILING DATE: 19-JUL-1993
13 PRIOR APPLICATION DATA:
14 APPLICATION NUMBER: US 07/722,334
15 FILING DATE: 28-JUN-1991
16 ATTORNEY/AGENT INFORMATION:
17 NAME: Greene, Jamie L.
18 REGISTRATION NUMBER: 32,467
19 REFERENCE/DOCKET NUMBER: 07362-0103
20 TELECOMMUNICATION INFORMATION:
21 TELEPHONE: (404) 818-3700
22 TELEFAX: (404) 818-3799
23 INFORMATION FOR SEQ ID NO: 9:
24 SEQUENCE CHARACTERISTICS:
25 LENGTH: 17 base pairs
26 TYPE: nucleic acid
27 STRANDEDNESS: single
28 TOPOLOGY: linear
29 MOLECULE TYPE: cDNA
30 HYPOTHETICAL: NO
31 ANTI-SENSE: NO
32 US-08-999-733-9
33
34 Query Match 68.0%; Score 6.8; DB 3; Length 17;
35 Best Local Similarity 66.7%; Pred. No. 4e+04;
36 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps
37
38 QY 2 DANCCKTCG 10
39 :| |||:
40
41 Db 16 TAGCGGTCG 8
42
43 RESULT 56
44 US-09-206-866-20/c
45 ; Sequence 20, Application US/09206866A
46 ; Patent No. 6150108
47 ; GENERAL INFORMATION:
48 ; APPLICANT: SZYP, Moshe
49 ; APPLICANT: BIGEY, Pascal
50 ; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
51 ; FILE REFERENCE: 106101.200
52 ; CURRENT APPLICATION NUMBER: US/09/206,866A
53 ; CURRENT FILING DATE: 1998-12-08
54 ; EARLIER APPLICATION NUMBER: US 08/653,954
55 ; EARLIER FILING DATE: 1996-05-22
56 ; EARLIER APPLICATION NUMBER: PCT/IB97/00879
57 ; EARLIER FILING DATE: 1997-05-22
58 ; EARLIER APPLICATION NUMBER: US 60/069,812
59 ; EARLIER FILING DATE: 1997-12-17
60 ; EARLIER APPLICATION NUMBER: US 09/194,284
61 ; EARLIER FILING DATE: 1998-11-23
62 ; NUMBER OF SEQ ID NOS: 41
63 ; SOFTWARE: PatentIn Ver. 2.0
64 ; SEQ ID NO 20
65 ; LENGTH: 17
66 ; TYPE: DNA
67 ; ORGANISM: Artificial Sequence
68 ; FEATURE:
69 ; NAME/KEY: misc-feature
70 ; LOCATION: (1)..(17)
71 ; OTHER INFORMATION: Nucleotides 1-17 contain c, t, a & g wherein
72 ; OTHER INFORMATION: c-cytidine; t-thymidine; a-adenosine; g-guanosine
73 ; OTHER INFORMATION: m is a methyl group at the 5-position of

```

```

; OTHER INFORMATION: nucleotides 1 & 5 of the cytosine portion of
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:synthetic
; OTHER INFORMATION: construct
US-09-206-866-20

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```

Query Match      68.0%; Score 6.8; DB 3; Length 17;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

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```

QY 2 DANCCKTGC 10
   :||:|
Db 9 AAACGTTGC 1

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RESULT 57

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US-09-206-866-21/c
; Sequence 21, Application US/09206866A
; Patent No. 6150108

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```

; GENERAL INFORMATION:
; APPLICANT: SZYF, Moshe
; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
; FILE REFERENCE: 106101.200
; CURRENT APPLICATION NUMBER: US/09/206,866A
; EARLIER FILING DATE: 1998-12-08
; EARLIER FILING DATE: 1996-05-22
; EARLIER FILING DATE: 1997-05-22
; EARLIER FILING DATE: 1997-05-22
; EARLIER FILING DATE: 1997-12-17
; EARLIER FILING DATE: 1997-12-17
; EARLIER FILING DATE: 1998-11-23
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 21
; TYPE: DNA
; LENGTH: 17
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(17)
; OTHER INFORMATION: Nucleotides 1-17 contain c, t, a & g wherein
; OTHER INFORMATION: c-cytidine; t-thymidine; a-adenosine; g-guanosine;
; OTHER INFORMATION: m is a methyl group at the 5-position of
; OTHER INFORMATION: nucleotides 1 & 5 of the cytosine portion of
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(16)
; OTHER INFORMATION: Nucleotide 16 is n wherein n = i and i = inosine.
; OTHER INFORMATION: Description of Artificial Sequence:synthetic
; OTHER INFORMATION: construct
US-09-206-866-21

```

```

Query Match      68.0%; Score 6.8; DB 3; Length 17;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

```

```

QY 2 DANCCKTGC 10
   :||:|
Db 9 AAACGTTGC 1

```

```

RESULT 58

```

```

US-09-206-866-22/c
; Sequence 22, Application US/09206866A
; Patent No. 6150108

```

```

; GENERAL INFORMATION:
; APPLICANT: SZYF, Moshe

```

```

; APPLICANT: BIGEY, Pascal
; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
; FILE REFERENCE: 106101.200
; CURRENT APPLICATION NUMBER: US/09/206,866A
; EARLIER FILING DATE: 1998-12-08
; EARLIER FILING DATE: 1996-05-22
; EARLIER FILING DATE: 1996-05-22
; EARLIER FILING DATE: 1997-05-22
; EARLIER FILING DATE: 1997-05-22
; EARLIER FILING DATE: 1997-12-17
; EARLIER FILING DATE: 1997-12-17
; EARLIER FILING DATE: 1998-11-23
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 22
; TYPE: DNA
; LENGTH: 17
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(17)
; OTHER INFORMATION: Nucleotides 1-17 contain c, t, a & g wherein
; OTHER INFORMATION: c-cytidine; t-thymidine; a-adenosine; g-guanosine;
; OTHER INFORMATION: m is a methyl group at the 5-position of
; OTHER INFORMATION: nucleotides 1 & 5 of the cytosine portion of
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(16)
; OTHER INFORMATION: Nucleotide 16 is n wherein n = u and u = uridine.
; OTHER INFORMATION: Description of Artificial Sequence:synthetic
; OTHER INFORMATION: construct
US-09-206-866-22

```

```

Query Match      68.0%; Score 6.8; DB 3; Length 17;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

```

```

QY 2 DANCCKTGC 10
   :||:|
Db 9 AAACGTTGC 1

```

```

RESULT 59

```

```

US-09-206-866-23/c
; Sequence 23, Application US/09206866A
; Patent No. 6150108

```

```

; GENERAL INFORMATION:
; APPLICANT: SZYF, Moshe
; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
; FILE REFERENCE: 106101.200
; CURRENT APPLICATION NUMBER: US/09/206,866A
; EARLIER FILING DATE: 1998-12-08
; EARLIER FILING DATE: 1996-05-22
; EARLIER FILING DATE: 1996-05-22
; EARLIER FILING DATE: 1997-05-22
; EARLIER FILING DATE: 1997-05-22
; EARLIER FILING DATE: 1997-12-17
; EARLIER FILING DATE: 1997-12-17
; EARLIER FILING DATE: 1998-11-23
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 23
; TYPE: DNA
; LENGTH: 17
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(17)

```


OTHER INFORMATION: Nucleotides 1-17 contain c, t, a & g wherein
 OTHER INFORMATION: c-cytidine; t-thymidine; a-adenosine; g-guanosine;
 OTHER INFORMATION: m is a methyl group at the 5-position of
 OTHER INFORMATION: nucleotides 1 & 5 of the cytosine portion of
 OTHER INFORMATION: cytidine.
 FEATURE:
 NAME/KEY: misc feature
 LOCATION: (1)..(16)
 OTHER INFORMATION: Nucleotides 12 & 16 are n wherein n = f and f =
 OTHER INFORMATION: 5-fluorocytosine.
 FEATURE:
 OTHER INFORMATION: Description of Artificial Sequence:synthetic
 OTHER INFORMATION: construct
 US-09-206-866-23

Query Match 68.0%; Score 6.8; DB 3; Length 17;
 Best Local Similarity 66.7%; Pred. No. 4e+04;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
 :| ||:|
 Db 9 AACGTTTCG 1

RESULT 60

US-09-206-866-24/c
 Sequence 24, Application US/09206866A
 Patent No. 6150108
 GENERAL INFORMATION:
 APPLICANT: SZYF, Moshe
 APPLICANT: BIGEY, Pascal
 TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
 FILE REFERENCE: 106101.200
 CURRENT APPLICATION NUMBER: US/09/206.866A
 CURRENT FILING DATE: 1998-12-08
 EARLIER APPLICATION NUMBER: US 08/653,954
 EARLIER FILING DATE: 1996-05-22
 EARLIER APPLICATION NUMBER: PCT/IB97/00879
 EARLIER FILING DATE: 1997-05-22
 EARLIER APPLICATION NUMBER: US 60/069,812
 EARLIER FILING DATE: 1997-12-17
 EARLIER APPLICATION NUMBER: US 09/194,284
 EARLIER FILING DATE: 1998-11-23
 NUMBER OF SEQ ID NOS: 41
 SOFTWARE: PatentIn Ver. 2.0
 SEQ ID NO 24
 LENGTH: 17
 TYPE: DNA
 ORGANISM: Artificial Sequence
 FEATURE:
 NAME/KEY: misc feature
 LOCATION: (1)..(17)
 OTHER INFORMATION: Nucleotides 1-17 contain c, t, a & g wherein
 OTHER INFORMATION: c-cytidine; t-thymidine; a-adenosine; g-guanosine;
 OTHER INFORMATION: m is a methyl group at the 5-position of
 OTHER INFORMATION: nucleotides 1 & 5 of the cytosine portion of
 OTHER INFORMATION: cytidine.
 FEATURE:
 NAME/KEY: misc feature
 LOCATION: (1)..(16)
 OTHER INFORMATION: Nucleotides 12 & 16 are n wherein n = b and b =
 OTHER INFORMATION: cytosine, inosine, uridine, 5-bromocytidine or
 OTHER INFORMATION: 5-fluorouridine.
 FEATURE:
 OTHER INFORMATION: Description of Artificial Sequence:synthetic
 OTHER INFORMATION: construct
 US-09-206-866-24

Query Match 68.0%; Score 6.8; DB 3; Length 17;
 Best Local Similarity 66.7%; Pred. No. 4e+04;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10

Db 9 AACGTTTCG 1
 :| ||:|

RESULT 61
 US-09-206-866A-20/c
 Sequence 20, Application US/09206866A
 Patent No. 6268137
 GENERAL INFORMATION:
 APPLICANT: SZYF, Moshe
 APPLICANT: BIGEY, Pascal
 TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
 FILE REFERENCE: 106101.200
 CURRENT APPLICATION NUMBER: US/09/206.866A
 CURRENT FILING DATE: 1998-12-08
 PRIOR APPLICATION NUMBER: US 08/653,954
 PRIOR FILING DATE: 1996-05-22
 PRIOR APPLICATION NUMBER: PCT/IB97/00879
 PRIOR FILING DATE: 1997-05-22
 PRIOR APPLICATION NUMBER: US 60/069,812
 PRIOR FILING DATE: 1997-12-17
 PRIOR APPLICATION NUMBER: US 09/194,284
 PRIOR FILING DATE: 1998-11-23
 NUMBER OF SEQ ID NOS: 41
 SOFTWARE: PatentIn Ver. 2.0
 SEQ ID NO 20
 LENGTH: 17
 TYPE: DNA
 ORGANISM: Artificial Sequence
 FEATURE:
 NAME/KEY: misc feature
 LOCATION: (1)..(17)
 OTHER INFORMATION: Nucleotides 1-17 contain c, t, a & g wherein
 OTHER INFORMATION: c-cytidine; t-thymidine; a-adenosine; g-guanosine;
 OTHER INFORMATION: m is a methyl group at the 5-position of
 OTHER INFORMATION: nucleotides 1 & 5 of the cytosine portion of
 OTHER INFORMATION: cytidine.
 OTHER INFORMATION: Description of Artificial Sequence:synthetic
 OTHER INFORMATION: construct
 US-09-206-866A-20

Query Match 68.0%; Score 6.8; DB 3; Length 17;
 Best Local Similarity 66.7%; Pred. No. 4e+04;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
 :| ||:|

RESULT 62
 US-09-206-866A-21/c
 Sequence 21, Application US/09206866A
 Patent No. 6268137
 GENERAL INFORMATION:
 APPLICANT: SZYF, Moshe
 APPLICANT: BIGEY, Pascal
 TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
 FILE REFERENCE: 106101.200
 CURRENT APPLICATION NUMBER: US/09/206.866A
 CURRENT FILING DATE: 1998-12-08
 PRIOR APPLICATION NUMBER: US 08/653,954
 PRIOR FILING DATE: 1996-05-22
 PRIOR APPLICATION NUMBER: PCT/IB97/00879
 PRIOR FILING DATE: 1997-05-22
 PRIOR APPLICATION NUMBER: US 60/069,812
 PRIOR FILING DATE: 1997-12-17
 PRIOR APPLICATION NUMBER: US 09/194,284
 PRIOR FILING DATE: 1998-11-23
 NUMBER OF SEQ ID NOS: 41
 SOFTWARE: PatentIn Ver. 2.0
 SEQ ID NO 21
 LENGTH: 17

```
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ NAME/KEY: misc feature
/ LOCATION: (1)..(17)
/ OTHER INFORMATION: Nucleotides 1-17 contain c, t, a & g wherein
/ OTHER INFORMATION: c=cytidine; t=thymidine; a=adenosine; g=guanosine;
/ OTHER INFORMATION: m is a methyl group at the 5-position of
/ OTHER INFORMATION: nucleotides 1 & 5 of the cytosine portion of
/ OTHER INFORMATION: cytidine.
/ NAME/KEY: misc feature
/ LOCATION: (1)..(16)
/ OTHER INFORMATION: Nucleotide 16 is n wherein n = i and i = inosine.
/ OTHER INFORMATION: Description of Artificial Sequence:synthetic
/ OTHER INFORMATION: construct
US-09-206-866A-21
```

```
Query Match      68.0%; Score 6.8; DB 3; Length 17;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
```

```
QY      2 DANCCKTTCG 10
      :|||:|
Db      9 AAACGTTTCG 1
```

```
RESULT 63
US-09-206-866A-22/c
; Sequence 22, Application US/09206866A
; Patent No. 6268137
; GENERAL INFORMATION:
; APPLICANT: SZYF, Moshe
; APPLICANT: BIGEY, Pascal
; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
; FILE REFERENCE: 106101.200
; CURRENT APPLICATION NUMBER: US/09/206,866A
; CURRENT FILING DATE: 1998-12-08
; PRIOR APPLICATION NUMBER: US 08/653,954
; PRIOR FILING DATE: 1996-05-22
; PRIOR APPLICATION NUMBER: PCT/IB97/00879
; PRIOR FILING DATE: 1997-05-22
; PRIOR FILING DATE: 1997-12-17
; PRIOR APPLICATION NUMBER: US 60/069,812
; PRIOR FILING DATE: 1997-12-17
; PRIOR APPLICATION NUMBER: US 09/194,284
; PRIOR FILING DATE: 1998-11-23
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 22
; LENGTH: 17
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(17)
; OTHER INFORMATION: Nucleotides 1-17 contain c, t, a & g wherein
; OTHER INFORMATION: c=cytidine; t=thymidine; a=adenosine; g=guanosine;
; OTHER INFORMATION: m is a methyl group at the 5-position of
; OTHER INFORMATION: nucleotides 1 & 5 of the cytosine portion of
; OTHER INFORMATION: cytidine.
; NAME/KEY: misc feature
; LOCATION: (1)..(16)
; OTHER INFORMATION: Nucleotide 16 is n wherein n = u and u = uridine.
; OTHER INFORMATION: Description of Artificial Sequence:synthetic
; OTHER INFORMATION: construct
US-09-206-866A-22
```

```
Query Match      68.0%; Score 6.8; DB 3; Length 17;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
```

```
QY      2 DANCCKTTCG 10
      :|||:|
Db      9 AAACGTTTCG 1
```

```
RESULT 64
US-09-206-866A-23/c
; Sequence 23, Application US/09206866A
; Patent No. 6268137
; GENERAL INFORMATION:
; APPLICANT: SZYF, Moshe
; APPLICANT: BIGEY, Pascal
; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
; FILE REFERENCE: 106101.200
; CURRENT APPLICATION NUMBER: US/09/206,866A
; CURRENT FILING DATE: 1998-12-08
; PRIOR APPLICATION NUMBER: US 08/653,954
; PRIOR FILING DATE: 1996-05-22
; PRIOR APPLICATION NUMBER: PCT/IB97/00879
; PRIOR FILING DATE: 1997-05-22
; PRIOR APPLICATION NUMBER: US 60/069,812
; PRIOR FILING DATE: 1997-12-17
; PRIOR APPLICATION NUMBER: US 09/194,284
; PRIOR FILING DATE: 1998-11-23
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 23
; LENGTH: 17
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(17)
; OTHER INFORMATION: Nucleotides 1-17 contain c, t, a & g wherein
; OTHER INFORMATION: c=cytidine; t=thymidine; a=adenosine; g=guanosine;
; OTHER INFORMATION: m is a methyl group at the 5-position of
; OTHER INFORMATION: nucleotides 1 & 5 of the cytosine portion of
; OTHER INFORMATION: cytidine.
; NAME/KEY: misc feature
; LOCATION: (1)..(16)
; OTHER INFORMATION: Nucleotides 12 & 16 are n wherein n = f and f =
; OTHER INFORMATION: 5-fluorocytosine.
; OTHER INFORMATION: Description of Artificial Sequence:synthetic
; OTHER INFORMATION: construct
US-09-206-866A-23
```

```
Query Match      68.0%; Score 6.8; DB 3; Length 17;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
```

```
QY      2 DANCCKTTCG 10
      :|||:|
Db      9 AAACGTTTCG 1
```

```
RESULT 65
US-09-206-866A-24/c
; Sequence 24, Application US/09206866A
; Patent No. 6268137
; GENERAL INFORMATION:
; APPLICANT: SZYF, Moshe
; APPLICANT: BIGEY, Pascal
; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
; FILE REFERENCE: 106101.200
; CURRENT APPLICATION NUMBER: US/09/206,866A
; CURRENT FILING DATE: 1998-12-08
; PRIOR APPLICATION NUMBER: US 08/653,954
; PRIOR FILING DATE: 1996-05-22
; PRIOR APPLICATION NUMBER: PCT/IB97/00879
; PRIOR FILING DATE: 1997-05-22
; PRIOR APPLICATION NUMBER: US 60/069,812
; PRIOR FILING DATE: 1997-12-17
; PRIOR APPLICATION NUMBER: US 09/194,284
; PRIOR FILING DATE: 1998-11-23
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn Ver. 2.0
```

; SEQ ID NO 24
; LENGTH: 17
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(17)
; OTHER INFORMATION: Nucleotides 1-17 contain c, t, a & g wherein
; OTHER INFORMATION: c=cytidine; t=thymidine; a=adenosine; g=guanosine;
; OTHER INFORMATION: m is a methyl group at the 5-position of
; OTHER INFORMATION: nucleotides 1 & 5 of the cytosine portion of
; OTHER INFORMATION: cytidine.
; NAME/KEY: misc feature
; LOCATION: (1)..(16)
; OTHER INFORMATION: Nucleotides 12 & 16 are n wherein n = b and b =
; OTHER INFORMATION: cytosine, inosine, uridine, 5-bromocytidine or
; OTHER INFORMATION: 5-fluorouridine.
; OTHER INFORMATION: Description of Artificial Sequence:synthetic
; OTHER INFORMATION: construct
US-09-206-866A-24

Query Match 68.0%; Score 6.8; DB 3; Length 17;
Best Local Similarity 66.7%; Pred. No. 4e+04; 1; Indels 0; Gaps 0;
Matches 6; Conservative 2; Mismatches 0;

QY 2 DANCCKTCG 10
: |||:|
DB 9 AACGTTTCG 1

RESULT 66

US-09-431-419A-71
; Sequence 71, Application US/09431419A
; Patent No. 6458567
; GENERAL INFORMATION:
; APPLICANT: Barber, Jack R.
; APPLICANT: Welch, Peter J.
; APPLICANT: Tritz, Richard
; APPLICANT: Yei, Soonpin
; APPLICANT: Yu, Mang
; TITLE OF INVENTION: HEPATITIS C VIRUS RIBOZYMES
; FILE REFERENCE: 480124.403C3
; CURRENT APPLICATION NUMBER: US/09/431.419A
; CURRENT FILING DATE: 1999-11-01
; NUMBER OF SEQ ID NOS: 73
; SOFTWARE: Fast-Seq for Windows Version 3.0
; SEQ ID NO 71
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Hepatitis C Virus
US-09-431-419A-71

Query Match 68.0%; Score 6.8; DB 3; Length 17;
Best Local Similarity 55.6%; Pred. No. 4e+04; 1; Indels 0; Gaps 0;
Matches 5; Conservative 3; Mismatches 1;

QY 2 DANCCKTCG 10
: |||:|
DB 1 GACGGGUCG 9

RESULT 67

US-09-469-211A-13/c
; Sequence 13, Application US/09469211A
; Patent No. 6660524
; GENERAL INFORMATION:
; APPLICANT: J. Turck
; APPLICANT: J. Archer
; TITLE OF INVENTION: CONTROL OF GENE EXPRESSION IN EUKARYOTES
; FILE REFERENCE: 9341-021
; CURRENT APPLICATION NUMBER: US/09/469.211A
; CURRENT FILING DATE: 1999-12-22
; PRIOR APPLICATION NUMBER: UK 9828660.2

; PRIOR FILING DATE: 1998-12-24
; NUMBER OF SEQ ID NOS: 19
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 13
; LENGTH: 17
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial
; OTHER INFORMATION: Sequence:op2
US-09-469-211A-13

Query Match 68.0%; Score 6.8; DB 4; Length 17;
Best Local Similarity 66.7%; Pred. No. 4e+04; 1; Indels 0; Gaps 0;
Matches 6; Conservative 2; Mismatches 1;

QY 2 DANCCKTCG 10
: |||:|
DB 14 TAGCGGTCG 6

RESULT 68

US-08-072-282-8/c
; Sequence 8, Application US/08072282
; Patent No. 5420009
; GENERAL INFORMATION:
; APPLICANT: Hartung, John S.
; APPLICANT: Pruvost, Olivier P.
; TITLE OF INVENTION: Probes and Primers for the Specific
; TITLE OF INVENTION: Detection of Xanthomonas campestris pv. citri
; NUMBER OF SEQUENCES: 8
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Janelle S. Graeter
; STREET: Building 005, Room 411, BARC-W
; CITY: Beltsville
; STATE: Maryland
; COUNTRY: U.S.A.
; ZIP: 20705
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/072,282
; FILING DATE: 19930609
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/855,804
; FILING DATE: 23-MAR-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Graeter, Janelle S.
; REGISTRATION NUMBER: 35,024
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (301)504-5676
; TELEFAX: (301)504-5060
; INFORMATION FOR SEQ ID NO: 8:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 18 base pairs
; TYPE: NUCLEIC ACID
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; HYPOTHETICAL: NO
; ANTI-SENSE: NO
; ORIGINAL SOURCE:
; ORGANISM: Xanthomonas campestris
; STRAIN: Pathovar citri, strain XC62
US-08-072-282-8

Query Match 68.0%; Score 6.8; DB 1; Length 18;
Best Local Similarity 66.7%; Pred. No. 4e+04; 1; Indels 0; Gaps 0;
Matches 6; Conservative 2; Mismatches 1;

```
QY      2 DANCCKTCG 10
      :||:||||
Db      14 GAACGGTCG 6

RESULT 69
US-08-758-306-1373
; Sequence 1373, Application US/08758306
; Patent No. 5807743
; GENERAL INFORMATION:
; APPLICANT: Stinchcomb, Dan T.
; TITLE OF INVENTION: METHOD AND REAGENT FOR THE
; TITLE OF INVENTION: TREATMENT OF DISEASES
; TITLE OF INVENTION: ASSOCIATED WITH
; TITLE OF INVENTION: INTERLEUKIN-2 RECEPTOR
; TITLE OF INVENTION: GAMMA-CHAIN EXPRESSION
; NUMBER OF SEQUENCES: 1379
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lyon & Lyon
; STREET: 633 West Fifth Street
; STREET: Suite 4700
; CITY: Los Angeles
; STATE: California
; COUNTRY: U.S.A.
; ZIP: 90071-2066
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
; MEDIUM TYPE: storage
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: IBM P.C. DOS 5.0
; SOFTWARE: FastSeq Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/758,306
; FILING DATE: December 3, 1996
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Warburg, Richard J.
; REGISTRATION NUMBER: 32,327
; REFERENCE/DOCKET NUMBER: 212/132
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 489-1600
; TELEFAX: (213) 955-0440
; TELEX: 67-3510
; INFORMATION FOR SEQ ID NO: 1373:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 18 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-758-306-1373

Query Match      68.0%; Score 6.8; DB 1; Length 18;
Best Local Similarity 55.6%; Pred. No. 4e+04;
Matches 5; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
      :||:||||
Db      3 GAACGGUCG 11

RESULT 70
US-08-928-692-68/c
; Sequence 68, Application US/08928692
; Patent No. 5958727
; GENERAL INFORMATION:
; APPLICANT: Brody, Howard
; APPLICANT: Yaver, Deborah S.
; APPLICANT: Lamsa, Michael

; APPLICANT: Hansen, Kim
; TITLE OF INVENTION: Methods for Modifying the Production of
; TITLE OF INVENTION: a Polypeptide
; NUMBER OF SEQUENCES: 80
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: No. 5958727o No. 5958727disk of No. 5958727th America, Inc.
; STREET: 405 Lexington Avenue
; CITY: New York
; STATE: NY
; COUNTRY: USA
; ZIP: 10174
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/928,692
; FILING DATE: 12-SEPT-1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Lambiris, Elias J
; REGISTRATION NUMBER: 33,728
; REFERENCE/DOCKET NUMBER: 4944.200-US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 212-867-0123
; TELEFAX: 212-878-9655
; INFORMATION FOR SEQ ID NO: 68:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 18 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-928-692-68

Query Match      68.0%; Score 6.8; DB 2; Length 18;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
      :||:||||
Db      15 AACCGTCG 7

RESULT 71
US-08-637-732A-22
; Sequence 22, Application US/08637732A
; Patent No. 6268171
; GENERAL INFORMATION:
; APPLICANT: Meyer, Thomas F.F.
; APPLICANT: Rudel, Thomas
; APPLICANT: Ryll, Roland R.
; APPLICANT: Scheuerfleug, Ina B.
; TITLE OF INVENTION: Recombinant Filc Proteins, Process for
; TITLE OF INVENTION: Producing Them and Their Use
; NUMBER OF SEQUENCES: 40
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Birch, Stewart, Kolasch & Birch, LLP
; STREET: P.O. Box 747
; CITY: Falls Church
; STATE: Virginia
; COUNTRY: USA
; ZIP: 22040-0747
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/637,732A
; FILING DATE: 28-JUN-1996
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
```

```
; NAME: Svensson, Leonard R.
; REGISTRATION NUMBER: 30330
; REFERENCE/DOCKET NUMBER: 147-155P(PCT)
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 703-205-8000
; TELEFAX: 703-205-8050
; INFORMATION FOR SEQ ID NO: 22:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 18 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "PCR primer T5c"
US-08-637-732A-22

Query Match      68.0%; Score 6.8; DB 3; Length 18;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCGRKTCG 10
DB      10 TAGCGGTTCG 18

RESULT 72
US-09-339-972-68/c
; Sequence 68, Application US/09339972
; Patent No. 6323002
; GENERAL INFORMATION:
; APPLICANT: Brody, Howard
; APPLICANT: Yaver, Deborah S.
; APPLICANT: Lamsa, Michael
; APPLICANT: Hansen, Kim
; TITLE OF INVENTION: Methods for Modifying the Production of
; TITLE OF INVENTION: a Polypeptide
; NUMBER OF SEQUENCES: 80
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: No. 63230020 No. 6323002disk of No. 6323002th America, Inc.
; STREET: 405 Lexington Avenue
; CITY: New York
; STATE: NY
; COUNTRY: USA
; ZIP: 10174
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/339,972
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/928,692
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Lambiris, Elias J
; REGISTRATION NUMBER: 33,728
; REFERENCE/DOCKET NUMBER: 4944,200-US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 212-867-0123
; TELEFAX: 212-878-9655
; INFORMATION FOR SEQ ID NO: 68:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 18 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-09-339-972-68

Query Match      68.0%; Score 6.8; DB 3; Length 18;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
```

```
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCGRKTCG 10
DB      15 AACCGGTTCG 7

RESULT 73
US-09-157-257-14
; Sequence 14, Application US/09157257
; Patent No. 6375954
; GENERAL INFORMATION:
; APPLICANT: DUTTA, Sukanta K.
; APPLICANT: BISWAS, Biswajit
; APPLICANT: VENULAPALLI, Ramesh
; TITLE OF INVENTION: A SIZE-VARIABLE STRAIN-SPECIFIC PROTECTIVE ANTIGEN FOR
; FILE REFERENCE: 8172-9016
; CURRENT APPLICATION NUMBER: US/09/157,257
; CURRENT FILING DATE: 1998-09-18
; EARLIER APPLICATION NUMBER: 60/059,252
; EARLIER FILING DATE: 1997-09-18
; NUMBER OF SEQ ID NOS: 48
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 14
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: primer
US-09-157-257-14

Query Match      68.0%; Score 6.8; DB 3; Length 18;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCGRKTCG 10
DB      6 TATCGTTCG 14

RESULT 74
US-09-728-498A-4
; Sequence 4, Application US/09728498A
; Patent No. 6623946
; GENERAL INFORMATION:
; APPLICANT: MOCKEL, BETTINA
; APPLICANT: PFEFFERLE, WALTER
; APPLICANT: MARX, ACHIM
; TITLE OF INVENTION: NEW NUCLEOTIDE SEQUENCES ENCODING THE SUCC AND SUCD
; FILE REFERENCE: PM 275338 990171 BT
; CURRENT APPLICATION NUMBER: US/09/728,498A
; CURRENT FILING DATE: 2001-08-31
; PRIOR APPLICATION NUMBER: DE 199 56 686.0
; PRIOR FILING DATE: 1999-11-25
; NUMBER OF SEQ ID NOS: 9
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 4
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Primer
US-09-728-498A-4

Query Match      68.0%; Score 6.8; DB 4; Length 18;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCGRKTCG 10
DB      7 AATCGTTCG 15
```

RESULT 75
US-09-083-268-9
; Sequence 9, Application US/09083268
; Patent No. 6673535
; GENERAL INFORMATION:
; APPLICANT: Pulst, Stefan M
; TITLE OF INVENTION: NUCLEIC ACID ENCODING SPINOCEREBELLAR
; TITLE OF INVENTION: ATAXIA-2 AND PRODUCTS RELATED THERETO
; NUMBER OF SEQUENCES: 18
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Muetting, Raasch & Gebhardt, P.A.
; STREET: 119 No. 6673535th Fourth Street
; CITY: Minneapolis
; STATE: Minnesota
; COUNTRY: USA
; ZIP: 55401
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/083,268
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/727,084
; FILING DATE: 08-OCT-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: McCormack, Myra H
; REGISTRATION NUMBER: 36,602
; REFERENCE/DOCKET NUMBER: 232.00010101
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 612/305-1220
; TELEFAX: 612/305-1228
; INFORMATION FOR SEQ ID NO: 9:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 18 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-09-083-268-9

Query Match 68.0%; Score 6.8; DB 4; Length 18;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
Db 3 AACCGTCG 11

RESULT 76
5245022-20/c
; Patent No. 5245022
; APPLICANT: WEIS, ALEXANDER L.; OAKES, FRED T.; HAUSHEER,
; FREDERICK H.; CAVANAUGH, PAUL F. JR.; MOSKWA, PATRICIA S.
; TITLE OF INVENTION: EXONUCLEASE RESISTANT TERMINALLY
; SUBSTITUTED OLIGONUCLEOTIDES
; NUMBER OF SEQUENCES: 35
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/562,180
; FILING DATE: 03-AUG-1990
; SEQ ID NO: 20:
; LENGTH: 18
5245022-20

Query Match 68.0%; Score 6.8; DB 6; Length 18;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
Db 11 AACCGTCG 3

RESULT 77
5245022-20/c
; Patent No. 5245022
; APPLICANT: WEIS, ALEXANDER L.; OAKES, FRED T.; HAUSHEER,
; FREDERICK H.; CAVANAUGH, PAUL F. JR.; MOSKWA, PATRICIA S.
; TITLE OF INVENTION: EXONUCLEASE RESISTANT TERMINALLY
; SUBSTITUTED OLIGONUCLEOTIDES
; NUMBER OF SEQUENCES: 35
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/562,180
; FILING DATE: 03-AUG-1990
; SEQ ID NO: 20:
; LENGTH: 18
5245022-20

Query Match 68.0%; Score 6.8; DB 6; Length 18;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
Db 11 AACCGTCG 3

RESULT 78
US-07-991-855-62/c
; Sequence 62, Application 07/991855
; Patent No. 5420032
; GENERAL INFORMATION:
; APPLICANT: Marshall, Philip
; TITLE OF INVENTION: Homing Endonuclease Which Originates
; TITLE OF INVENTION: From Chlamydomonas Eugametos and Recognizes a
; TITLE OF INVENTION: 15, 17 or 19 Degenerate Doublee Stranded Nucleotide
; NUMBER OF SEQUENCES: 74
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Merchant & Gould
; STREET: 3100 No. 5420032west Center
; CITY: Minneapolis
; STATE: MN
; COUNTRY: USA
; ZIP: 55402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: 07/991,855
; FILING DATE: 16-DEC-1992
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/813,129
; FILING DATE: 23-DEC-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Woessner, Warren D.
; REGISTRATION NUMBER: 30,440
; REFERENCE/DOCKET NUMBER: 9555.18-US-01
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 612-332-5300
; TELEFAX: 612-332-9081
; INFORMATION FOR SEQ ID NO: 62:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 19 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single

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;
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-07-991-855-62

Query Match      68.0%; Score 6.8; DB 1; Length 19;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
DB 19 GAACGGTCG 11

RESULT 79
US-07-991-855-64/c
; Sequence 64, Application 07/991855
; Patent No. 5420032
; GENERAL INFORMATION:
; APPLICANT: Marshall, Philip
; TITLE OF INVENTION: Homing Endonuclease Which Originates
; TITLE OF INVENTION: From Chlamydomonas Eugametos and Recognizes and Cleaves a
; TITLE OF INVENTION: 15, 17 or 19 Degenerate Doublee Stranded Nucleotide
; TITLE OF INVENTION: Sequence
; NUMBER OF SEQUENCES: 74
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Merchant & Gould
; STREET: 3100 No. 5420032west Center
; CITY: Minneapolis
; STATE: MN
; COUNTRY: USA
; ZIP: 55402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: 07/991,855
; FILING DATE: 16-DEC-1992
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/813,129
; FILING DATE: 23-DEC-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Woessner, Warren D.
; REGISTRATION NUMBER: 30,440
; REFERENCE/DOCKET NUMBER: 9555.18-US-01
; TELEPHONE: 612-332-5300
; TELEFAX: 612-332-9081
; INFORMATION FOR SEQ ID NO: 64:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 19 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-07-991-855-64

Query Match      68.0%; Score 6.8; DB 1; Length 19;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
DB 19 TAGCGGTCG 11

RESULT 80
US-09-050-559C-16/c
; Sequence 16, Application US/09050559C
; Patent No. 6096502
```

```
;
; GENERAL INFORMATION:
; APPLICANT: Sam S-K Lee
; TITLE OF INVENTION: NOVEL SUBSTRATE FOR DETECTING UL9
; TITLE OF INVENTION: HELICASE ACTIVITY
; NUMBER OF SEQUENCES: 37
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: David J. Weitz, Wilson Sonsini Goodrich
; ADDRESSEE: & Rosati
; STREET: 650 Page Mill Road
; CITY: Palo Alto
; STATE: California
; COUNTRY: USA
; ZIP: 94304-1050
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch diskette
; COMPUTER: IBM compatible
; OPERATING SYSTEM: Microsoft Windows 95/DOS 5.0
; SOFTWARE: Wordperfect for windows 6.0,
; SOFTWARE: ASCII (DOS) TEXT format
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/050,559C
; FILING DATE:
; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: David J. Weitz
; REGISTRATION NUMBER: 38,362
; REFERENCE/DOCKET NUMBER: 16842-746
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (650) 493-9300
; TELEFAX: (650) 493-6811
; INFORMATION FOR SEQ ID NO: 16:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 19 nucleotides
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
US-09-050-559C-16

Query Match      68.0%; Score 6.8; DB 3; Length 19;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
DB 19 AAGCGTTCG 11

RESULT 81
US-09-216-393B-333
; Sequence 333, Application US/09216393B
; Patent No. 6514694
; GENERAL INFORMATION:
; APPLICANT: Milhausen, Michael James
; TITLE OF INVENTION: TOXOPLASMA GONDII PROTEINS, NUCLEIC ACID MOLECULES, AND USES THERE
; FILE REFERENCE: TX-1-C2
; CURRENT APPLICATION NUMBER: US/09/216,393B
; CURRENT FILING DATE: 1998-12-18
; PRIOR APPLICATION NUMBER: 08/994,825
; PRIOR FILING DATE: 1997-12-19
; NUMBER OF SEQ ID NOS: 366
; SOFTWARE: Patent in version 3.1
; SEQ ID NO 333
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Primer
US-09-216-393B-333

Query Match      68.0%; Score 6.8; DB 4; Length 19;
```

Best Local Similarity 66.7%; Pred. No. 4e+04; Indels 1; Gaps 0;
 Matches 6; Conservative 2; Mismatches 1; Indels 1; Gaps 0;
 QY 2 DANCCKTCG 10
 Db 6 AACGGTTCG 14

RESULT 82
 US-09-672-717-16/c
 ; Sequence 16, Application US/09672717
 ; Patent No. 6673917
 ; GENERAL INFORMATION:
 ; APPLICANT: Korneluk, Robert G.
 ; APPLICANT: LaCasse, Eric
 ; APPLICANT: Baird, Stephen
 ; APPLICANT: Holcik, Martin
 ; APPLICANT: Young, Sean
 ; TITLE OF INVENTION: Antisense IAP Nucleic Acids and Uses
 ; FILE REFERENCE: 07891/025001
 ; CURRENT APPLICATION NUMBER: US/09/672,717
 ; CURRENT FILING DATE: 2000-09-28
 ; NUMBER OF SEQ ID NOS: 231
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 16
 ; LENGTH: 19
 ; TYPE: DNA
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: based on Homo sapiens
 US-09-672-717-16

Query Match 68.0%; Score 6.8; DB 4; Length 19;
 Best Local Similarity 66.7%; Pred. No. 4e+04; Indels 1; Gaps 0;
 Matches 6; Conservative 2; Mismatches 1; Indels 1; Gaps 0;
 QY 2 DANCCKTCG 10
 Db 12 TAGCGGTCG 4

RESULT 83
 US-08-983-605-299
 ; Sequence 299, Application US/08983605A
 ; Patent No. 6720137
 ; GENERAL INFORMATION:
 ; APPLICANT: Roder, Marion
 ; TITLE OF INVENTION: Microsatellite Markers for Plants of the Species
 ; TITLE OF INVENTION: Triticum aestivum and Tribe Triticaceae and the Use of
 ; TITLE OF INVENTION: Said Markers
 ; FILE REFERENCE: 2936.10400
 ; CURRENT APPLICATION NUMBER: US/08/983,605A
 ; CURRENT FILING DATE: 1998-05-01
 ; EARLIER APPLICATION NUMBER: DE 195 25 284.5
 ; EARLIER FILING DATE: 1995-06-28
 ; NUMBER OF SEQ ID NOS: 466
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 299
 ; LENGTH: 19
 ; TYPE: DNA
 ; ORGANISM: Triticum aestivum
 US-08-983-605-299

Query Match 68.0%; Score 6.8; DB 4; Length 19;
 Best Local Similarity 66.7%; Pred. No. 4e+04; Indels 1; Gaps 0;
 Matches 6; Conservative 2; Mismatches 1; Indels 1; Gaps 0;
 QY 2 DANCCKTCG 10
 Db 9 TAGCGGTCG 17

RESULT 84
 US-07-889-651-6/c
 ; Sequence 6, Application US/07889651
 ; Patent No. 5352580
 ; GENERAL INFORMATION:
 ; APPLICANT: Spears, Patricia A.
 ; APPLICANT: Shank, Daryl D.
 ; TITLE OF INVENTION: Mycobacteria Probes
 ; NUMBER OF SEQUENCES: 25
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Richard J. Rodrick
 ; STREET: 1 Becton Drive
 ; CITY: Franklin Lakes
 ; STATE: New Jersey
 ; COUNTRY: USA
 ; ZIP: 07417-1880
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: PatentIn Release #1.0, Version #1.25
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/07/889,651
 ; FILING DATE: 19920526
 ; CLASSIFICATION: 435
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Stierwalt, Brian K.
 ; REGISTRATION NUMBER: 33,213
 ; REFERENCE/DOCKET NUMBER: P-2512
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: 201-847-5317
 ; TELEFAX: 201-848-9228
 ; INFORMATION FOR SEQ ID NO: 6:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 20 base pairs
 ; TYPE: NUCLEIC ACID
 ; STRANDEDNESS: single
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: cDNA
 US-07-889-651-6

Query Match 68.0%; Score 6.8; DB 1; Length 20;
 Best Local Similarity 66.7%; Pred. No. 3.9e+04; Indels 1; Gaps 0;
 Matches 6; Conservative 2; Mismatches 1; Indels 1; Gaps 0;
 QY 2 DANCCKTCG 10
 Db 17 AATCGTTCG 9

RESULT 85
 US-07-963-490-3/c
 ; Sequence 3, Application US/07963490
 ; Patent No. 5552310
 ; GENERAL INFORMATION:
 ; APPLICANT: YOSHIKURA, Hiroshi
 ; APPLICANT: SHIMIZU, Yoshio
 ; APPLICANT: IWAMOTO, Aikichi
 ; APPLICANT: HIJIKATA, Minako
 ; TITLE OF INVENTION: REPLICATION OF HEPATITIS C VIRUS GENOME
 ; TITLE OF INVENTION: AND IDENTIFICATION OF VIRUS HAVING HIGH INFECTIVITY
 ; NUMBER OF SEQUENCES: 8
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: WEGNER, CANTOR, MUELLER & PLAYER
 ; STREET: 1233 20th Street, N.W., Suite 300
 ; CITY: Washington
 ; STATE: D.C.
 ; COUNTRY: U.S.A.
 ; ZIP: 20036-8218
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS


```
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/963,490
; FILING DATE: 20-OCT-1992
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: JP 4-153786
; FILING DATE: 12-JUN-1992
; APPLICATION DATA:
; APPLICATION NUMBER: JP 4-304351
; FILING DATE: 19-OCT-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Cantor, Herbert I.
; REGISTRATION NUMBER: 24,392
; REFERENCE/DOCKET NUMBER: P-450-23593
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 835-0605
; TELEFAX: (202) 835-0605
; TELEX: 440706 and 248394
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-07-963-490-3

Query Match      68.0%; Score 6.8; DB 1; Length 20;
Best Local Similarity 66.7%; Pred. No. 3.9e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCGRKTCG 10
Db      10 GACCGTTCG 2

; RESULT 86
; US-08-502-185-24/c
; Sequence 24, Application US/08502185
; Patent No. 5639736
; GENERAL INFORMATION:
; APPLICANT: Robinson, Gregory S.
; TITLE OF INVENTION: Human VEGF-Specific
; TITLE OF INVENTION: Oligonucleotides
; NUMBER OF SEQUENCES: 53
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lappin & Kusmer
; STREET: 200 State Street
; CITY: Boston
; STATE: Massachusetts
; COUNTRY: USA
; ZIP: 02109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE:
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/502,185
; FILING DATE:
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Kerner, Ann-Louise
; REGISTRATION NUMBER: 33,523
; REFERENCE/DOCKET NUMBER: HY2-031CPDV1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-330-1300
; TELEFAX: 617-330-1311
; INFORMATION FOR SEQ ID NO: 24:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
```

```
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; HYPOTHETICAL: NO
; ANTI-SENSE: YES
; US-08-502-185-24

Query Match      68.0%; Score 6.8; DB 1; Length 20;
Best Local Similarity 66.7%; Pred. No. 3.9e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCGRKTCG 10
Db      14 AACCGGTCG 6

; RESULT 87
; US-08-398-945-24/c
; Sequence 24, Application US/08398945
; Patent No. 5639872
; GENERAL INFORMATION:
; APPLICANT: Robinson, Gregory S.
; TITLE OF INVENTION: Human VEGF-Specific
; TITLE OF INVENTION: Oligonucleotides
; NUMBER OF SEQUENCES: 53
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lappin & Kusmer
; STREET: 200 State Street
; CITY: Boston
; STATE: Massachusetts
; COUNTRY: USA
; ZIP: 02109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE:
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/398,945
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Kerner, Ann-Louise
; REGISTRATION NUMBER: 33,523
; REFERENCE/DOCKET NUMBER: HY2-031CIP
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-330-1300
; TELEFAX: 617-330-1311
; INFORMATION FOR SEQ ID NO: 24:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; HYPOTHETICAL: NO
; ANTI-SENSE: YES
; US-08-398-945-24

Query Match      68.0%; Score 6.8; DB 1; Length 20;
Best Local Similarity 66.7%; Pred. No. 3.9e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCGRKTCG 10
Db      14 AACCGGTCG 6

; RESULT 88
; US-08-501-779-24/c
; Sequence 24, Application US/08501779
; Patent No. 5661135
; GENERAL INFORMATION:
```

APPLICANT: Robinson, Gregory S.
TITLE OF INVENTION: Human VEGF-Specific
Oligonucleotides
NUMBER OF SEQUENCES: 53
CORRESPONDENCE ADDRESS:
ADDRESSEE: Lappin & Kusmer
STREET: 200 State Street
CITY: Boston
STATE: Massachusetts
COUNTRY: USA
ZIP: 02109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE:
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/501,779
FILING DATE:
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: Kerner, Ann-Louise
REGISTRATION NUMBER: 33,523
REFERENCE/DOCKET NUMBER: HYZ-031CPDV2
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-330-1300
TELEFAX: 617-330-1311
INFORMATION FOR SEQ ID NO: 24:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: cDNA
HYPOTHETICAL: NO
ANTI-SENSE: YES
US-08-501-779-24

Query Match 68.0%; Score 6.8; DB 1; Length 20;
Best Local Similarity 66.7%; Pred. No. 3.9e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGKTCG 10
:|:|:|:|:
Db 14 AACGGGTCG 6

RESULT 89
US-08-501-713-24/c
Sequence 24, Application US/08501713
Patent No. 5710136
GENERAL INFORMATION:
APPLICANT: Robinson, Gregory S.
APPLICANT: Smith, Lois E.H.
TITLE OF INVENTION: Inhibition of
TITLE OF INVENTION: Neovascularization Using
TITLE OF INVENTION: VEGF-Specific
Oligonucleotides
NUMBER OF SEQUENCES: 53
CORRESPONDENCE ADDRESS:
ADDRESSEE: Lappin & Kusmer
STREET: 200 State Street
CITY: Boston
STATE: Massachusetts
COUNTRY: USA
ZIP: 02109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE:
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/501,713

FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Kerner, Ann-Louise
REGISTRATION NUMBER: 33,523
REFERENCE/DOCKET NUMBER: HYZ-031DV2
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-330-1300
TELEFAX: 617-330-1311
INFORMATION FOR SEQ ID NO: 24:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: cDNA
HYPOTHETICAL: NO
ANTI-SENSE: YES
US-08-501-713-24

Query Match 68.0%; Score 6.8; DB 1; Length 20;
Best Local Similarity 66.7%; Pred. No. 3.9e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGKTCG 10
:|:|:|:|:
Db 14 AACGGGTCG 6

RESULT 90
US-08-446-660-3/c
Sequence 3, Application US/08446660
Patent No. 5723328
GENERAL INFORMATION:
APPLICANT: Dalboege, Henrik
APPLICANT: Andersen, Lene N
APPLICANT: Kofed, Lene V
APPLICANT: Kauppinen, Markus S
APPLICANT: Christgau, Stephan
TITLE OF INVENTION: AN ENZYME WITH ENDOGLUCANASE ACTIVITY
NUMBER OF SEQUENCES: 19
CORRESPONDENCE ADDRESS:
ADDRESSEE: No. 57233280 No. 5723328disk of No. 5723328th America, Inc.
STREET: 405 Lexington Avenue, 64th Floor
CITY: New York
STATE: New York
COUNTRY: United States of America
ZIP: 10174-6401
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/446,660
FILING DATE: 26-MAY-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Harrington, James J.
REGISTRATION NUMBER: 38,711
REFERENCE/DOCKET NUMBER: 3950.204-US
TELECOMMUNICATION INFORMATION:
TELEPHONE: 212-867-0123
TELEFAX: 212-878-9655
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
US-08-446-660-3

Query Match 68.0%; Score 6.8; DB 1; Length 20;

Best Local Similarity 66.7%; Pred. No. 3.9e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
Db 17 AATCGGTCG 9

RESULT 91
US-08-378-860-24/c
; Sequence 24, Application US/08378860
; Patent No. 5731294
; GENERAL INFORMATION:
; APPLICANT: Robinson, Gregory S.
; APPLICANT: Smith, Lois E.H.
; TITLE OF INVENTION: Inhibition of
; TITLE OF INVENTION: Neovascularization Using
; TITLE OF INVENTION: VEGF-Specific
; TITLE OF INVENTION: Oligonucleotides
; NUMBER OF SEQUENCES: 53
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lappin & Kusmer
; STREET: 200 State Street
; CITY: Boston
; STATE: Massachusetts
; COUNTRY: USA
; ZIP: 02109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE:
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/378,860
; FILING DATE:
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Kerner, Ann-Louise
; REGISTRATION NUMBER: 33,523
; REFERENCE/DOCKET NUMBER: HYZ-031
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-330-1300
; TELEFAX: 617-330-1311
; INFORMATION FOR SEQ ID NO: 24:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; HYPOTHETICAL: NO
; ANTI-SENSE: YES
US-08-378-860-24

Query Match 68.0%; Score 6.8; DB 1; Length 20;
Best Local Similarity 66.7%; Pred. No. 3.9e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
Db 14 AAGCGGTCG 6

RESULT 92
US-08-623-891-4/c
; Sequence 4, Application US/08623891
; Patent No. 5795778
; GENERAL INFORMATION:
; APPLICANT: Kenneth G. Draper
; TITLE OF INVENTION: METHOD AND REAGENT FOR
; TITLE OF INVENTION: INHIBITING HERPES SIMPLEX
; TITLE OF INVENTION: VIRUS REPLICATION
; NUMBER OF SEQUENCES: 115

; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lyon & Lyon
; STREET: 611 West Sixth Street
; CITY: Los Angeles
; STATE: California
; COUNTRY: USA
; ZIP: 90017
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: IBM P.C. DOS (Version 5.0)
; SOFTWARE: WordPerfect (Version 5.1)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/623,891
; FILING DATE:
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/238,200
; FILING DATE:
; APPLICATION NUMBER: US/07/987,133
; FILING DATE:
; APPLICATION NUMBER: 07/882,921
; FILING DATE: May 14, 1992
; APPLICATION NUMBER: 07/948,359
; FILING DATE: September 18, 1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Warburg, Richard J.
; REGISTRATION NUMBER: 32,327
; REFERENCE/DOCKET NUMBER: 200/209
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 489-1600
; TELEFAX: (213) 955-0440
; TELEX: 67-3510
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-623-891-4

Query Match 68.0%; Score 6.8; DB 1; Length 20;
Best Local Similarity 66.7%; Pred. No. 3.9e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
Db 19 GACCGGTCG 11

RESULT 93
US-08-501-626-24/c
; Sequence 24, Application US/08501626
; Patent No. 5801156
; GENERAL INFORMATION:
; APPLICANT: Robinson, Gregory S.
; APPLICANT: Smith, Lois E.H.
; TITLE OF INVENTION: Inhibition of
; TITLE OF INVENTION: Neovascularization Using
; TITLE OF INVENTION: VEGF-Specific
; TITLE OF INVENTION: Oligonucleotides
; NUMBER OF SEQUENCES: 53
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lappin & Kusmer
; STREET: 200 State Street
; CITY: Boston
; STATE: Massachusetts
; COUNTRY: USA
; ZIP: 02109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE:
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/501,626
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Kerner, Ann-Louise
REGISTRATION NUMBER: 33,523
REFERENCE/DOCKET NUMBER: HYZ-031DV4
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-330-1300
TELEFAX: 617-330-1311
INFORMATION FOR SEQ ID NO: 24:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: cDNA
HYPOTHETICAL: NO
ANTI-SENSE: YES
US-08-501-626-24

Query Match 68.0%; Score 6.8; DB 1; Length 20;
Best Local Similarity 66.7%; Pred. No. 3.9e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: ||: |||
Db 14 AACCGGTCG 6

RESULT 94
US-08-418-859-11
Sequence 11, Application US/08418859
Patent No. 5811235
GENERAL INFORMATION:
APPLICANT: Jeffreys, Alec J.
TITLE OF INVENTION: METHOD OF
NUMBER OF SEQUENCES: 57
CORRESPONDENCE ADDRESS:
ADDRESSEE: Cushman, Darby & Cushman
STREET: 1100 New York Avenue, N.W.
CITY: Washington
STATE: D.C.
COUNTRY: U.S.A.
ZIP: 20005-3918
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 1.2 Mb
COMPUTER: IBM PS/2
OPERATING SYSTEM: PC-DOS 3.20
SOFTWARE: ASCII from WPS-PLUS
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/418,859
FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/935,107
FILING DATE: 26 August 1992
APPLICATION NUMBER: 9118371.5
FILING DATE: 27-Aug-1991
APPLICATION NUMBER: 9119089.2
FILING DATE: 06-Sep-1991
APPLICATION NUMBER: 9124636.3
FILING DATE: 20-No. 5811235-1991
APPLICATION NUMBER: 9207379.0
FILING DATE: 03-Apr-1992
APPLICATION NUMBER: 9212627.5
FILING DATE: 15-Jun-1992
APPLICATION NUMBER: 9212881.8
FILING DATE: 17-Jun-1992
ATTORNEY/AGENT INFORMATION:
NAME: KOKULIS, PAUL N.
REGISTRATION NUMBER: 16,773
REFERENCE/DOCKET NUMBER: 97279/PHM.36520/US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (292) 861-3000
TELEFAX: (202) 822-0944
INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 Base Pairs

NAME: KOKULIS, PAUL N.
REGISTRATION NUMBER: 16,773
REFERENCE/DOCKET NUMBER: 97279/PHM.36520/US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (292) 861-3000
TELEFAX: (202) 822-0944
INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 Base Pairs
TYPE: Nucleic Acid
STRANDEDNESS: Single
TOPOLOGY: Linear
US-08-418-859-11

Query Match 68.0%; Score 6.8; DB 1; Length 20;
Best Local Similarity 66.7%; Pred. No. 3.9e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: ||: |||
Db 3 GACCCGTCG 11

RESULT 95
US-08-418-859-11/c
Sequence 11, Application US/08418859
Patent No. 5811235
GENERAL INFORMATION:
APPLICANT: Jeffreys, Alec J.
TITLE OF INVENTION: METHOD OF
NUMBER OF SEQUENCES: 57
CORRESPONDENCE ADDRESS:
ADDRESSEE: Cushman, Darby & Cushman
STREET: 1100 New York Avenue, N.W.
CITY: Washington
STATE: D.C.
COUNTRY: U.S.A.
ZIP: 20005-3918
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 1.2 Mb
COMPUTER: IBM PS/2
OPERATING SYSTEM: PC-DOS 3.20
SOFTWARE: ASCII from WPS-PLUS
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/418,859
FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/935,107
FILING DATE: 26 August 1992
APPLICATION NUMBER: 9118371.5
FILING DATE: 27-Aug-1991
APPLICATION NUMBER: 9119089.2
FILING DATE: 06-Sep-1991
APPLICATION NUMBER: 9124636.3
FILING DATE: 20-No. 5811235-1991
APPLICATION NUMBER: 9207379.0
FILING DATE: 03-Apr-1992
APPLICATION NUMBER: 9212627.5
FILING DATE: 15-Jun-1992
APPLICATION NUMBER: 9212881.8
FILING DATE: 17-Jun-1992
ATTORNEY/AGENT INFORMATION:
NAME: KOKULIS, PAUL N.
REGISTRATION NUMBER: 16,773
REFERENCE/DOCKET NUMBER: 97279/PHM.36520/US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (292) 861-3000
TELEFAX: (202) 822-0944
INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 Base Pairs

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; TYPE: Nucleic Acid
; STRANDEDNESS: Single
; TOPOLOGY: Linear
; US-08-418-859-11
;
Query Match 68.0%; Score 6.8; DB 1; Length 20;
Best Local Similarity 66.7%; Pred.No.3.9e+04;
Matches 6; Conservative 2; Mismatches 1; Indels

QY 2 DANCCKTCG 10
DB 10 GACCGTCG 2

RESULT 96
US-08-501-356-24/c
; Sequence 24, Application US/08501356
; Patent No. 5814620
; GENERAL INFORMATION:
; APPLICANT: Robinson, Gregory S.
; APPLICANT: Smith, Lois E.H.
; TITLE OF INVENTION: Inhibition of
; TITLE OF INVENTION: Neovascularization Using
; TITLE OF INVENTION: VEGF-Specific
; TITLE OF INVENTION: Oligonucleotides
; NUMBER OF SEQUENCES: 53
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lappin & Kusmer
; STREET: 200 State Street
; CITY: Boston
; STATE: Massachusetts
; COUNTRY: USA
; ZIP: 02109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE:
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/501,356
; FILING DATE:
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Kerner, Ann-Louise
; REGISTRATION NUMBER: 33,523
; REFERENCE/DOCKET NUMBER: HYZ-031DV3
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-330-1300
; TELEFAX: 617-330-1311
; INFORMATION FOR SEQ ID NO: 24:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; HYPOTHETICAL: NO
; ANTI-SENSE: YES
; US-08-501-356-24
;
Query Match 68.0%; Score 6.8; DB 1; Length 20;
Best Local Similarity 66.7%; Pred.No.3.9e+04;
Matches 6; Conservative 2; Mismatches 1; Indels

QY 2 DANCCKTCG 10
DB 14 AAGCGTCG 6

RESULT 97
US-08-506-864A-11/c
; Sequence 11, Application US/08506864A
; Patent No. 5834245

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APPLICATION NUMBER: US/08/643,181
FILING DATE: 26 August 1992
CLASSIFICATION: 9118371.5
PRIOR APPLICATION DATA: US/08/418,859
FILING DATE: 27-Aug-1991
APPLICATION NUMBER: 9119089.2
FILING DATE: 06-Sep-1991
APPLICATION NUMBER: 9124636.3
FILING DATE: 20-Jun-1992
APPLICATION NUMBER: 9207379.0
FILING DATE: 03-Apr-1992
APPLICATION NUMBER: 9212627.5
FILING DATE: 15-Jun-1992
APPLICATION NUMBER: 9212881.8
FILING DATE: 17-Jun-1992
ATTORNEY/AGENT INFORMATION:
NAME: KOKULIS, PAUL N.
REGISTRATION NUMBER: 16,773
REFERENCE/DOCKET NUMBER: 97279/PHM.36520/US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (292) 861-3000
TELEFAX: (202) 822-0944
INFORMATION FOR SEQ ID NO: 11:
LENGTH: 20 Base Pairs
TYPE: Nucleic Acid
STRANDEDNESS: Single
TOPOLOGY: Linear
US-08-643-181-11

Query Match 68.0%; Score 6.8; DB 2; Length 20;
Best Local Similarity 66.7%; Pred. No. 3.9e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
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DB 3 GACCCGTCG 11

RESULT 99
US-08-643-181-11/c
; Sequence 11, Application US/08643181
; Patent No. 5853989
; GENERAL INFORMATION:
; APPLICANT: Jeffreys, Alec J.
; TITLE OF INVENTION: METHOD OF
; TITLE OF INVENTION: CHARACTERISATION
; NUMBER OF SEQUENCES: 57
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Cushman, Darby & Cushman
; STREET: 1100 New York Avenue, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: U.S.A.
; ZIP: 20005-3918
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette, 3.50 inch, 1.2 Mb
; MEDIUM TYPE: storage
; COMPUTER: IBM PS/2
; OPERATING SYSTEM: PC-DOS 3.20
; SOFTWARE: ASCII from WPS-PLUS
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/643,181
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/418,859
; FILING DATE:

APPLICATION NUMBER: 07/935,107
FILING DATE: 26 August 1992
APPLICATION NUMBER: 9118371.5
FILING DATE: 27-Aug-1991
APPLICATION NUMBER: 9119089.2
FILING DATE: 06-Sep-1991
APPLICATION NUMBER: 9124636.3
FILING DATE: 20-Jun-1992
APPLICATION NUMBER: 9207379.0
FILING DATE: 03-Apr-1992
APPLICATION NUMBER: 9212627.5
FILING DATE: 15-Jun-1992
APPLICATION NUMBER: 9212881.8
FILING DATE: 17-Jun-1992
ATTORNEY/AGENT INFORMATION:
NAME: KOKULIS, PAUL N.
REGISTRATION NUMBER: 16,773
REFERENCE/DOCKET NUMBER: 97279/PHM.36520/US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (292) 861-3000
TELEFAX: (202) 822-0944
INFORMATION FOR SEQ ID NO: 11:
LENGTH: 20 Base Pairs
TYPE: Nucleic Acid
STRANDEDNESS: Single
TOPOLOGY: Linear
US-08-643-181-11

Query Match 68.0%; Score 6.8; DB 2; Length 20;
Best Local Similarity 66.7%; Pred. No. 3.9e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||: |||
DB 10 GACCCGTCG 2

RESULT 100
US-08-470-426B-30
; Sequence 30, Application US/08470426B
; Patent No. 5856458
; GENERAL INFORMATION:
; APPLICANT: Okamoto, Hiroaki
; APPLICANT: Nakamura, Tetsuo
; TITLE OF INVENTION: OLIGONUCLEOTIDE PRIMERS, AND THEIR
; TITLE OF INVENTION: APPLICATION FOR HIGH-FIDELITY DETECTION OF NON-A, NON-B
; TITLE OF INVENTION: HEPATITIS VIRUS
; NUMBER OF SEQUENCES: 33
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Beveridge, DeGrandi, Weilacher & Young,
; ADDRESSEE: L.L.P.
; STREET: 1850 M Street, N.W., Suite 800
; CITY: Washington
; STATE: DC
; COUNTRY: USA
; ZIP: 20036
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/470,426B
; FILING DATE: 06-JUN-1995
; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: JP 2-153402
; FILING DATE: 12-JUN-1990
; ATTORNEY/AGENT INFORMATION:
; NAME: Weilacher, Robert G.
; REGISTRATION NUMBER: 20,531
; REFERENCE/DOCKET NUMBER: 06/59-47083.1

TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 659-2811
TELEFAX: (202) 659-1462
INFORMATION FOR SEQ ID NO: 30:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: unknown
MOLECULE TYPE: DNA (genomic)
US-08-470-426B-30

Query Match 68.0%; Score 6.8; DB 2; Length 20;
Best Local Similarity 66.7%; Pred. No. 3.9e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
Db 10 GAGCGGTCG 18

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Perfect score: 10
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Maximum Match 100%
Listing first 100 summaries

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23: /cgn2_6/prodata/1/pubpna/US11A_PUBCOMB.seq:
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Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | Query Match | Length | ID | Description |
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| 4 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-67 |
| 5 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-68 |
| 6 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-69 |
| 7 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-70 |
| 8 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-71 |
| 9 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-72 |
| 10 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-73 |
| 11 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-74 |
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| 18 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-81 |
| 19 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-82 |
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| 21 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-84 |
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| 27 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-90 |
| 28 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-91 |
| 29 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-92 |
| 30 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-93 |
| 31 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-94 |
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| 35 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-98 |
| 36 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-99 |
| 37 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-100 |
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| 43 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-106 |
| 44 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-107 |
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| 46 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-109 |
| 47 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-110 |
| 48 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-111 |
| 49 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-112 |
| 50 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-113 |
| 51 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-114 |
| 52 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-115 |
| 53 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-116 |
| 54 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-117 |
| 55 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-118 |
| 56 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-119 |
| 57 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-120 |
| 58 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-121 |
| 59 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-122 |
| 60 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-123 |
| 61 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-124 |
| 62 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-125 |
| 63 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-126 |
| 64 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-127 |
| 65 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-128 |
| 66 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-129 |
| 67 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-130 |
| 68 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-131 |
| 69 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-132 |
| 70 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-133 |
| 71 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-134 |
| 72 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-135 |
| 73 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-136 |
| 74 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-137 |
| 75 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-138 |
| 76 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-139 |
| 77 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-140 |
| 78 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-141 |
| 79 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-142 |
| 80 | 6.8 | 68.0 | 10 | 14 | US-10-033-243-143 |

Sequence 21, Appl
Sequence 22, Appl
Sequence 5, Appl
Sequence 6, Appl
Sequence 7, Appl
Sequence 8, Appl
Sequence 9, Appl
Sequence 10, Appl
Sequence 11, Appl
Sequence 12, Appl
Sequence 13, Appl
Sequence 14, Appl
Sequence 15, Appl
Sequence 16, Appl
Sequence 17, Appl
Sequence 18, Appl
Sequence 19, Appl
Sequence 20, Appl

81 6.8 68.0 10 17 US-10-328-578-21
82 6.8 68.0 10 17 US-10-328-578-22
83 6.8 68.0 10 19 US-10-623-371-5
84 6.8 68.0 10 19 US-10-623-371-6
85 6.8 68.0 10 19 US-10-623-371-7
86 6.8 68.0 10 19 US-10-623-371-8
87 6.8 68.0 10 19 US-10-623-371-9
88 6.8 68.0 10 19 US-10-623-371-10
89 6.8 68.0 10 19 US-10-623-371-11
90 6.8 68.0 10 19 US-10-623-371-12
91 6.8 68.0 10 19 US-10-623-371-13
92 6.8 68.0 10 19 US-10-623-371-14
93 6.8 68.0 10 19 US-10-623-371-15
94 6.8 68.0 10 19 US-10-623-371-16
95 6.8 68.0 10 19 US-10-623-371-17
96 6.8 68.0 10 19 US-10-623-371-18
97 6.8 68.0 10 19 US-10-623-371-19
98 6.8 68.0 10 19 US-10-623-371-20
99 6.8 68.0 10 19 US-10-623-371-21
100 6.8 68.0 10 19 US-10-623-371-22

ALIGNMENTS

RESULT 1

US-10-033-243-62
; Sequence 62, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; FILE REFERENCE: 377882001800
; CURRENT FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 62
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG

NAME/KEY: misc_feature
LOCATION: 1
OTHER INFORMATION: n= t, g, c, or 5-bromocytosine
FEATURE:
NAME/KEY: misc_feature
LOCATION: 4
OTHER INFORMATION: n= t or m
US-10-033-243-62

Query Match 68.0%; Score 6.8; DB 14; Length 10;
Best Local Similarity 100.0%; Pred. No. 2.3e+05;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||||
Db 2 DANCCKTCG 10

RESULT 2

US-10-033-243-63
; Sequence 63, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino

; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 63
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-63

Query Match 68.0%; Score 6.8; DB 14; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||||
Db 2 GAACGTCG 10

RESULT 3

US-10-033-243-64
; Sequence 64, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 64
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG

US-10-033-243-64

Query Match 68.0%; Score 6.8; DB 14; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||||
Db 2 GAACGTCG 10

RESULT 4

US-10-033-243-67
; Sequence 67, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27

; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 67
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-67

Query Match 68.0%; Score 6.8; DB 14; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: ||: |||
Db 2 GAACGCTCG 10

RESULT 5
US-10-033-243-68
; Sequence 68, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 68
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-68

Query Match 68.0%; Score 6.8; DB 14; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: ||: |||
Db 2 GAACGCTCG 10

RESULT 6
US-10-033-243-69
; Sequence 69, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 69
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:

; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-69

Query Match 68.0%; Score 6.8; DB 14; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: ||: |||
Db 2 GATCGGTCG 10

RESULT 7
US-10-033-243-70
; Sequence 70, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 70
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-70

Query Match 68.0%; Score 6.8; DB 14; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: ||: |||
Db 2 GATCGGTCG 10

RESULT 8
US-10-033-243-71
; Sequence 71, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 71
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-71

Query Match 68.0%; Score 6.8; DB 14; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

```
QY      2 DANCCKTCG 10
      :||:||||
Db      2 GAACGGTCG 10

RESULT 9
US-10-033-243-72
; Sequence 72, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 72
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-72

      Query Match      68.0%; Score 6.8; DB 14; Length 10;
      Best Local Similarity 66.7%; Pred. No. 2.3e+05;
      Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
      :||:||||
Db      2 TAACGGTCG 10

RESULT 10
US-10-033-243-73
; Sequence 73, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 73
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-73

      Query Match      68.0%; Score 6.8; DB 14; Length 10;
      Best Local Similarity 66.7%; Pred. No. 2.3e+05;
      Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
      :||:||||
Db      2 TAACGGTCG 10

RESULT 11
US-10-033-243-74
; Sequence 74, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 74
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-74

      Query Match      68.0%; Score 6.8; DB 14; Length 10;
      Best Local Similarity 66.7%; Pred. No. 2.3e+05;
      Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
      :||:||||
Db      2 TAACGGTCG 10

RESULT 12
US-10-033-243-75
; Sequence 75, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 75
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-75

      Query Match      68.0%; Score 6.8; DB 14; Length 10;
      Best Local Similarity 66.7%; Pred. No. 2.3e+05;
      Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
      :||:||||
Db      2 TAACGGTCG 10

RESULT 13
US-10-033-243-76
; Sequence 76, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 76
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-76

      Query Match      68.0%; Score 6.8; DB 14; Length 10;
      Best Local Similarity 66.7%; Pred. No. 2.3e+05;
      Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
      :||:||||
Db      2 TAACGGTCG 10
```

; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; PRIOR FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 76
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
; NAME/KEY: misc_feature
; LOCATION: 1
; OTHER INFORMATION: n = 5-bromocytosine
US-10-033-243-76

Query Match 68.0%; Score 6.8; DB 14; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
Db 2 GACCGTTCG 10

RESULT 14
US-10-033-243-77
; Sequence 77, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 77
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-77

Query Match 68.0%; Score 6.8; DB 14; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
Db 2 GACCGTTCG 10

RESULT 15
US-10-033-243-77/c
; Sequence 77, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03

; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 77
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-77

Query Match 68.0%; Score 6.8; DB 14; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
Db 9 GACCGTTCG 1

RESULT 16
US-10-033-243-78
; Sequence 78, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 78
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-78

Query Match 68.0%; Score 6.8; DB 14; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
Db 2 GACCGTTCG 10

RESULT 17
US-10-033-243-78/c
; Sequence 78, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 78
; LENGTH: 10
; TYPE: DNA

```
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-78

Query Match      68.0%; Score 6.8; DB 14; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
Db      9 GAACGGTCG 1
      :| | | |
      :| | | |

RESULT 18
US-10-033-243-79
; Sequence 79, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 79
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
; NAME/KEY: misc_feature
; LOCATION: 1
; OTHER INFORMATION: n = 5-bromocytosine
US-10-033-243-79

Query Match      68.0%; Score 6.8; DB 14; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
Db      9 GAACGGTCG 1
      :| | | |
      :| | | |

RESULT 19
US-10-033-243-80
; Sequence 80, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 80
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-80

Query Match      68.0%; Score 6.8; DB 14; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
Db      9 GAACGGTCG 1
      :| | | |
      :| | | |

RESULT 20
US-10-033-243-81
; Sequence 81, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 81
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-81

Query Match      68.0%; Score 6.8; DB 14; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
Db      9 GAACGGTCG 1
      :| | | |
      :| | | |

RESULT 21
US-10-033-243-82
; Sequence 82, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 82
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-82

Query Match      68.0%; Score 6.8; DB 14; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
Db      9 GAACGGTCG 1
      :| | | |
      :| | | |
```


Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
Db 2 GATCGTTCG 10

RESULT 26
US-10-176-883-8
; Sequence 8, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-8

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
Db 2 GATCGTTCG 10

RESULT 27
US-10-176-883-9
; Sequence 9, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 9
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-9

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
Db 2 GATCGTTCG 10

RESULT 28
US-10-176-883-10
; Sequence 10, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 10
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-10

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
Db 2 GATCGTTCG 10

RESULT 29
US-10-176-883-11
; Sequence 11, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-11

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: ||: |||
Db 2 GAACGTCG 10

RESULT 30
US-10-176-883-12
; Sequence 12, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-12

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: ||: |||
Db 2 TAACGTCG 10

RESULT 31
US-10-176-883-13
; Sequence 13, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 13
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-13

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

Db : ||: |||
2 TATCGTCG 10

RESULT 32
US-10-176-883-14
; Sequence 14, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 14
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-14

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: ||: |||
Db 2 TACCGTCG 10

RESULT 33
US-10-176-883-15
; Sequence 15, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 15
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-15

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: ||: |||

Db 2 AACGTTTCG 10

RESULT 34

US-10-176-883-16
; Sequence 16, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE OF INVENTION: METHODS OF USING THE SAME-I
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 16
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
; NAME/KEY: variation
; LOCATION: 1
; OTHER INFORMATION: n = 5-bromocytosine
US-10-176-883-16

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANGKTCG 10

Db 2 GACCGTTCG 10

RESULT 35

US-10-176-883-17
; Sequence 17, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE OF INVENTION: METHODS OF USING THE SAME-I
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-17

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANGKTCG 10

Db 2 GAACGTTTCG 10

RESULT 36

US-10-176-883-17/c
; Sequence 17, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE OF INVENTION: METHODS OF USING THE SAME-I
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-17

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANGKTCG 10

Db 9 GAACGTTTCG 1

RESULT 37

US-10-176-883-18
; Sequence 18, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE OF INVENTION: METHODS OF USING THE SAME-I
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 18
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-18

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

```
QY 2 DANCCKTCG 10
Db 2 GACGGTTCG 10

Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

RESULT 38
US-10-176-883-18/c
; Sequence 18, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-I
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 18
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-18

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
Db 9 GACGGTTCG 1

RESULT 39
US-10-176-883-19
; Sequence 19, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-I
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 19
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
; FEATURE:
; NAME/KEY: variation
; LOCATION: 1
; OTHER INFORMATION: n = 5-bromocytosine
US-10-176-883-19

Query Match 68.0%; Score 6.8; DB 16; Length 10;

QY 2 DANCCKTCG 10
Db 2 GACGGTTCG 10

Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

RESULT 40
US-10-176-883-20
; Sequence 20, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-I
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 20
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-20

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
Db 2 TAACGUTCG 10

RESULT 41
US-10-176-883-21
; Sequence 21, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-I
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 21
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-21

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
```

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANGKTCG 10
:| ||:|
Db 2 UAACGUTCG 10

RESULT 42

US-10-176-883-22
; Sequence 22, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 22
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-22

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANGKTCG 10
:| ||:|
Db 2 TAACGTTTCG 10

RESULT 43

US-10-177-826-5
; Sequence 5, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 5
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-5

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANGKTCG 10
:| ||:|
Db 2 GAACGTTTCG 10

RESULT 44

US-10-177-826-6
; Sequence 6, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 6
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-6

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANGKTCG 10
:| ||:|
Db 2 GAACGTTTCG 10

RESULT 45

US-10-177-826-7
; Sequence 7, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 7
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-7

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: ||: |||
Db 2 GAACGCTCG 10

RESULT 46
US-10-177-826-8
; Sequence 8, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-8

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: ||: |||
Db 2 GACCGTTCG 10

RESULT 47
US-10-177-826-9
; Sequence 9, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 9
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-9

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

Db 2 GATCGGTCG 10
: ||: |||

RESULT 48
US-10-177-826-10
; Sequence 10, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 10
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-10

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: ||: |||
Db 2 GATCGTTCG 10

RESULT 49
US-10-177-826-11
; Sequence 11, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-11

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: ||: |||

Db 2 GAACGGTCG 10

```
RESULT 50
US-10-177-826-12
; Sequence 12, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-II
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-12
```

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGRKTCG 10
: |||:|
Db 2 TAACGGTTCG 10

```
RESULT 51
US-10-177-826-13
; Sequence 13, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-II
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 13
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-13
```

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGRKTCG 10
: |||:|
Db 2 TAACGGTTCG 10

```
RESULT 52
US-10-177-826-14
; Sequence 14, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-II
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 14
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-14
```

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGRKTCG 10
: |||:|
Db 2 TACCGTTCG 10

```
RESULT 53
US-10-177-826-15
; Sequence 15, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-II
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 15
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-15
```

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGRKTCG 10
: |||:|
Db 2 AACCGTTCG 10

```
RESULT 54
US-10-177-826-16
; Sequence 16, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-II
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 16
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
; NAME/KEY: variation
; LOCATION: 1
; OTHER INFORMATION: n = 5-bromocytosine
US-10-177-826-16

Query Match      68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
Db      2 GACCGTTCG 10

RESULT 55
US-10-177-826-17
; Sequence 17, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-II
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-17

Query Match      68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
Db      2 GACCGTTCG 10

RESULT 56
US-10-177-826-17/c
; Sequence 17, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-II
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-17

Query Match      68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
Db      2 GACCGTTCG 10

RESULT 57
US-10-177-826-18
; Sequence 18, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-II
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 18
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-18

Query Match      68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
Db      2 GACCGTTCG 10
```

Db 2 GAACGGTTCG 10

RESULT 58
US-10-177-826-18/c
; Sequence 18, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 18
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-18

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

:|:|:|

Db 9 GAACGGTTCG 1

RESULT 59
US-10-177-826-19
; Sequence 19, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 19
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
; NAME/KEY: variation
; LOCATION: 1
; OTHER INFORMATION: n = 5-bromocytosine
US-10-177-826-19

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

:|:|:|

Db 2 GAACGGTTCG 10

RESULT 60
US-10-177-826-20
; Sequence 20, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 20
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-20

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

:|:|:|

Db 2 TAACGGTTCG 10

RESULT 61
US-10-177-826-21
; Sequence 21, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 21
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-21

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;


```
QY      2 DANCCKTCG 10
Db      2 UAACGTCG 10

RESULT 62
US-10-177-826-22
; Sequence 22, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 22
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-22

Query Match      68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
Db      2 UAACGTCG 10

RESULT 63
US-10-328-578-5
; Sequence 5, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002020
; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; PRIOR APPLICATION NUMBER: US 10/177,826
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 5
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-5

Query Match      68.0%; Score 6.8; DB 17; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
Db      2 UAACGTCG 10

RESULT 64
US-10-328-578-6
; Sequence 6, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002020
; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; PRIOR APPLICATION NUMBER: US 10/177,826
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 6
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-6

Query Match      68.0%; Score 6.8; DB 17; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
Db      2 UAACGTCG 10

RESULT 65
US-10-328-578-7
; Sequence 7, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002020
; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; PRIOR APPLICATION NUMBER: US 10/177,826
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 7
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-7

Query Match      68.0%; Score 6.8; DB 17; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
```

```
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Synthetic construct
US-10-328-578-7

Query Match      68.0%; Score 6.8; DB 17; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
Db      2 GACCGTTCG 10
      :|||:|||

RESULT 66
US-10-328-578-8
/ Sequence 8, Application US/10328578
/ Publication No. US20030225016A1
/ GENERAL INFORMATION:
/ APPLICANT: Fearon, Karen L.
/ APPLICANT: Dina, Dino
/ APPLICANT: Tuck, Stephen F.
/ TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
/ FILE REFERENCE: 377882002020
/ CURRENT APPLICATION NUMBER: US/10/328,578
/ CURRENT FILING DATE: 2003-05-16
/ PRIOR APPLICATION NUMBER: US 10/176,883
/ PRIOR FILING DATE: 2002-06-21
/ PRIOR APPLICATION NUMBER: US 60/299,883
/ PRIOR FILING DATE: 2001-06-21
/ PRIOR APPLICATION NUMBER: US 60/375,253
/ PRIOR FILING DATE: 2002-04-23
/ PRIOR APPLICATION NUMBER: US 10/177,826
/ PRIOR FILING DATE: 2002-06-21
/ NUMBER OF SEQ ID NOS: 152
/ SOFTWARE: FastSeq for Windows Version 4.0
/ SEQ ID NO 8
/ LENGTH: 10
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Synthetic construct
US-10-328-578-8

Query Match      68.0%; Score 6.8; DB 17; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
Db      2 GACCGTTCG 10
      :|||:|||

RESULT 67
US-10-328-578-9
/ Sequence 9, Application US/10328578
/ Publication No. US20030225016A1
/ GENERAL INFORMATION:
/ APPLICANT: Fearon, Karen L.
/ APPLICANT: Dina, Dino
/ APPLICANT: Tuck, Stephen F.
/ TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
/ FILE REFERENCE: 377882002020
/ CURRENT APPLICATION NUMBER: US/10/328,578
/ CURRENT FILING DATE: 2003-05-16
/ PRIOR APPLICATION NUMBER: US 10/176,883
/ PRIOR FILING DATE: 2002-06-21
/ PRIOR APPLICATION NUMBER: US 60/299,883
/ PRIOR FILING DATE: 2001-06-21
/ PRIOR APPLICATION NUMBER: US 60/375,253
```

```
/ PRIOR FILING DATE: 2002-04-23
/ PRIOR APPLICATION NUMBER: US 10/177,826
/ PRIOR FILING DATE: 2002-06-21
/ NUMBER OF SEQ ID NOS: 152
/ SOFTWARE: FastSeq for Windows Version 4.0
/ SEQ ID NO 9
/ LENGTH: 10
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Synthetic construct
US-10-328-578-9

Query Match      68.0%; Score 6.8; DB 17; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
Db      2 GATCGGTCG 10
      :|||:|||

RESULT 68
US-10-328-578-10
/ Sequence 10, Application US/10328578
/ Publication No. US20030225016A1
/ GENERAL INFORMATION:
/ APPLICANT: Fearon, Karen L.
/ APPLICANT: Dina, Dino
/ APPLICANT: Tuck, Stephen F.
/ TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
/ FILE REFERENCE: 377882002020
/ CURRENT APPLICATION NUMBER: US/10/328,578
/ CURRENT FILING DATE: 2003-05-16
/ PRIOR APPLICATION NUMBER: US 10/176,883
/ PRIOR FILING DATE: 2002-06-21
/ PRIOR APPLICATION NUMBER: US 60/299,883
/ PRIOR FILING DATE: 2001-06-21
/ PRIOR APPLICATION NUMBER: US 60/375,253
/ PRIOR FILING DATE: 2002-04-23
/ PRIOR APPLICATION NUMBER: US 10/177,826
/ PRIOR FILING DATE: 2002-06-21
/ NUMBER OF SEQ ID NOS: 152
/ SOFTWARE: FastSeq for Windows Version 4.0
/ SEQ ID NO 10
/ LENGTH: 10
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Synthetic construct
US-10-328-578-10

Query Match      68.0%; Score 6.8; DB 17; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
Db      2 GATCGGTCG 10
      :|||:|||

RESULT 69
US-10-328-578-11
/ Sequence 11, Application US/10328578
/ Publication No. US20030225016A1
/ GENERAL INFORMATION:
/ APPLICANT: Fearon, Karen L.
/ APPLICANT: Dina, Dino
/ APPLICANT: Tuck, Stephen F.
/ TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
/ FILE REFERENCE: 377882002020
```

; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-11

Query Match 68.0%; Score 6.8; DB 17; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: || ||: |||
DB 2 GAACGGTCG 10

RESULT 70
US-10-328-578-12
; Sequence 12, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002020
; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-12

Query Match 68.0%; Score 6.8; DB 17; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: || ||: |||
DB 2 TAACGGTCG 10

RESULT 71
US-10-328-578-13
; Sequence 13, Application US/10328578
; Publication No. US20030225016A1

; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002020
; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 13
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-13

Query Match 68.0%; Score 6.8; DB 17; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: || ||: |||
DB 2 TATCGGTCG 10

RESULT 72
US-10-328-578-14
; Sequence 14, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002020
; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 14
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-14

Query Match 68.0%; Score 6.8; DB 17; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: || ||: |||

```
Db      2 TACCGTTCG 10

RESULT 73
US-10-328-578-15
; Sequence 15, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-III
; FILE REFERENCE: 377882002020
; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 15
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-15

Query Match      68.0%; Score 6.8; DB 17; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
       :|||:
Db      2 GACCGTTCG 10

RESULT 75
US-10-328-578-17
; Sequence 17, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-III
; FILE REFERENCE: 377882002020
; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-17

Query Match      68.0%; Score 6.8; DB 17; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
       :|||:
Db      2 GACCGTTCG 10

RESULT 76
US-10-328-578-17/c
; Sequence 17, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-III
; FILE REFERENCE: 377882002020
; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 16
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-17/c

Query Match      68.0%; Score 6.8; DB 17; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
       :|||:
Db      2 GACCGTTCG 10

RESULT 74
US-10-328-578-16
; Sequence 16, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-III
; FILE REFERENCE: 377882002020
; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 16
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-16

Query Match      68.0%; Score 6.8; DB 17; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
       :|||:
Db      2 AACCGTTCG 10
```

```
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-17

Query Match      68.0%; Score 6.8; DB 17; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
       :|||:|
Db      9 GAACGTCG 1

RESULT 77
US-10-328-578-18
; Sequence 18, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE OF INVENTION: METHODS OF USING THE SAME-III
; FILE REFERENCE: 377882002020
; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 18
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-18

Query Match      68.0%; Score 6.8; DB 17; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
       :|||:|
Db      9 GAACGTCG 1

RESULT 78
US-10-328-578-18/c
; Sequence 18, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE OF INVENTION: METHODS OF USING THE SAME-III
; FILE REFERENCE: 377882002020
; CURRENT APPLICATION NUMBER: US/10/328,578
```

```
; CURRENT FILING DATE: 2003-05-16
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 19
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-19

Query Match      68.0%; Score 6.8; DB 17; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
       :|||:|
Db      9 GAACGTCG 1

RESULT 79
US-10-328-578-19
; Sequence 19, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE OF INVENTION: METHODS OF USING THE SAME-III
; FILE REFERENCE: 377882002020
; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 19
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-19

Query Match      68.0%; Score 6.8; DB 17; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
       :|||:|
Db      2 GAACGTCG 10

RESULT 80
```

US-10-328-578-20
; Sequence 20, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-III
; FILE REFERENCE: 377882002020
; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR FILING DATE: 2002-06-21
; PRIOR FILING DATE: 2002-06-21
; PRIOR FILING DATE: 2001-06-21
; PRIOR FILING DATE: 2002-04-23
; PRIOR FILING DATE: 2002-04-23
; PRIOR FILING DATE: 2002-06-21
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 20
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-20

Query Match 68.0%; Score 6.8; DB 17; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
Db 2 TAACGTCG 10

RESULT 81
US-10-328-578-21
; Sequence 21, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-III
; FILE REFERENCE: 377882002020
; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR FILING DATE: 2002-06-21
; PRIOR FILING DATE: 2002-06-21
; PRIOR FILING DATE: 2001-06-21
; PRIOR FILING DATE: 2002-04-23
; PRIOR FILING DATE: 2002-04-23
; PRIOR FILING DATE: 2002-06-21
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 21
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-21

Query Match 68.0%; Score 6.8; DB 17; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
Db 2 UAACGTCG 10

RESULT 82
US-10-328-578-22
; Sequence 22, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-III
; FILE REFERENCE: 377882002020
; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR FILING DATE: 2002-06-21
; PRIOR FILING DATE: 2002-06-21
; PRIOR FILING DATE: 2001-06-21
; PRIOR FILING DATE: 2002-04-23
; PRIOR FILING DATE: 2002-04-23
; PRIOR FILING DATE: 2002-06-21
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 22
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-22

Query Match 68.0%; Score 6.8; DB 17; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
Db 2 TAACGTCG 10

RESULT 83
US-10-623-371-5
; Sequence 5, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-IV
; FILE REFERENCE: 377882002021
; CURRENT APPLICATION NUMBER: US/10/623,371
; CURRENT FILING DATE: 2003-07-18
; PRIOR FILING DATE: 2002-12-23
; PRIOR FILING DATE: 2002-12-23
; PRIOR FILING DATE: 2002-06-21
; PRIOR FILING DATE: 2002-06-21
; PRIOR FILING DATE: 2001-06-21
; PRIOR FILING DATE: 2001-06-21
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 5
; LENGTH: 10

```
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-623-371-5
Query Match      68.0%; Score 6.8; DB 19; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
   :|:|:|:|
Db 2 GAACGTCG 10

RESULT 84
US-10-623-371-6
; Sequence 6, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; APPLICANT: TUCK, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002021
; CURRENT FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US 10/328,578
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 6
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-623-371-6
Query Match      68.0%; Score 6.8; DB 19; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
   :|:|:|:|
Db 2 GAACGTCG 10

RESULT 85
US-10-623-371-7
; Sequence 7, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; APPLICANT: TUCK, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002021
; CURRENT FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US 10/328,578
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 7
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-623-371-7
Query Match      68.0%; Score 6.8; DB 19; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
   :|:|:|:|
Db 2 GAACGTCG 10

RESULT 86
US-10-623-371-8
; Sequence 8, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; APPLICANT: TUCK, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002021
; CURRENT FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US 10/328,578
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-623-371-8
Query Match      68.0%; Score 6.8; DB 19; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
   :|:|:|:|
Db 2 GAACGTCG 10

RESULT 87
US-10-623-371-9
; Sequence 9, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
```

```
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-623-371-7
Query Match      68.0%; Score 6.8; DB 19; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
   :|:|:|:|
Db 2 GAACGTCG 10

RESULT 86
US-10-623-371-8
; Sequence 8, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; APPLICANT: TUCK, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002021
; CURRENT FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US 10/328,578
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-623-371-8
Query Match      68.0%; Score 6.8; DB 19; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
   :|:|:|:|
Db 2 GAACGTCG 10

RESULT 87
US-10-623-371-9
; Sequence 9, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
```

; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; APPLICANT: TUCK, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-IV
; FILE REFERENCE: 377882002021
; CURRENT APPLICATION NUMBER: US/10/623,371
; CURRENT FILING DATE: 2003-07-18
; PRIOR FILING DATE: 2002-12-23 US 10/328,578
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 9
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-623-371-9

Query Match 68.0%; Score 6.8; DB 19; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
:|:|:|:|
Db 2 GATCGGTCG 10

RESULT 88
US-10-623-371-10
; Sequence 10, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; APPLICANT: TUCK, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-IV
; FILE REFERENCE: 377882002021
; CURRENT APPLICATION NUMBER: US/10/623,371
; CURRENT FILING DATE: 2003-07-18
; PRIOR FILING DATE: 2002-12-23 US 10/328,578
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 10
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-623-371-10

Query Match 68.0%; Score 6.8; DB 19; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
:|:|:|:|
Db 2 GATCGGTCG 10

RESULT 89
US-10-623-371-11
; Sequence 11, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; APPLICANT: TUCK, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-IV
; FILE REFERENCE: 377882002021
; CURRENT APPLICATION NUMBER: US/10/623,371
; CURRENT FILING DATE: 2003-07-18
; PRIOR FILING DATE: 2002-12-23 US 10/328,578
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-623-371-11

Query Match 68.0%; Score 6.8; DB 19; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
:|:|:|:|
Db 2 GATCGGTCG 10

RESULT 90
US-10-623-371-12
; Sequence 12, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; APPLICANT: TUCK, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-IV
; FILE REFERENCE: 377882002021
; CURRENT APPLICATION NUMBER: US/10/623,371
; CURRENT FILING DATE: 2003-07-18
; PRIOR FILING DATE: 2002-12-23 US 10/328,578
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSEQ for Windows Version 4.0


```
; SEQ ID NO 12
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-623-371-12

Query Match      68.0%; Score 6.8; DB 19; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
       :|||:|
Db      2 TAACGTCG 10

RESULT 91
US-10-623-371-13
; Sequence 13, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; APPLICANT: TUCK, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002021
; CURRENT APPLICATION NUMBER: US/10/623,371
; CURRENT FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US 10/328,578
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 13
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-623-371-13

Query Match      68.0%; Score 6.8; DB 19; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
       :|||:|
Db      2 TAACGTCG 10

RESULT 92
US-10-623-371-14
; Sequence 14, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; APPLICANT: TUCK, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002021
; CURRENT APPLICATION NUMBER: US/10/623,371
; CURRENT FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US 10/328,578
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 14
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-623-371-14

Query Match      68.0%; Score 6.8; DB 19; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
       :|||:|
Db      2 TAACGTCG 10

RESULT 93
US-10-623-371-15
; Sequence 15, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; APPLICANT: TUCK, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002021
; CURRENT APPLICATION NUMBER: US/10/623,371
; CURRENT FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US 10/328,578
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 15
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-623-371-15

Query Match      68.0%; Score 6.8; DB 19; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
       :|||:|
Db      2 TAACGTCG 10

RESULT 94
US-10-623-371-16
; Sequence 16, Application US/10623371
```

```
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; APPLICANT: TUCK, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-IV
; FILE REFERENCE: 377882002021
; CURRENT APPLICATION NUMBER: US/10/623,371
; CURRENT FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US 10/328,578
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 16
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
; NAME/KEY: variation
; LOCATION: 1
; OTHER INFORMATION: n = 5-bromocytosine
US-10-623-371-16
```

```
Query Match 68.0%; Score 6.8; DB 19; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
```

```
QY 2 DANCGKTCG 10
Db 2 GACCGTTCG 10
```

```
RESULT 95
US-10-623-371-17
; Sequence 17, Application US/106233371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; APPLICANT: TUCK, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-IV
; FILE REFERENCE: 377882002021
; CURRENT APPLICATION NUMBER: US/10/623,371
; CURRENT FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US 10/328,578
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
```

```
; OTHER INFORMATION: Synthetic construct
US-10-623-371-17
Query Match 68.0%; Score 6.8; DB 19; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGKTCG 10
Db 2 GACCGTTCG 10

RESULT 96
US-10-623-371-17/c
; Sequence 17, Application US/106233371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; APPLICANT: TUCK, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-IV
; FILE REFERENCE: 377882002021
; CURRENT APPLICATION NUMBER: US/10/623,371
; CURRENT FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US 10/328,578
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-623-371-17
```

```
Query Match 68.0%; Score 6.8; DB 19; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGKTCG 10
Db 9 GACCGTTCG 1
```

```
RESULT 97
US-10-623-371-18
; Sequence 18, Application US/106233371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; APPLICANT: TUCK, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-IV
; FILE REFERENCE: 377882002021
; CURRENT APPLICATION NUMBER: US/10/623,371
; CURRENT FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US 10/328,578
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
```

; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 18
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-623-371-18

Query Match 68.0%; Score 6.8; DB 19; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGRKTCG 10
: |||||
Db 2 GACCGTTCG 10

RESULT 98

US-10-623-371-18/c
; Sequence 18, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.

; APPLICANT: DINA, Dino
; APPLICANT: TUCK, Stephen F.

; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-IV

; FILE REFERENCE: 377882002021

; CURRENT APPLICATION NUMBER: US/10/623,371

; CURRENT FILING DATE: 2003-07-18

; PRIOR APPLICATION NUMBER: US 10/328,578

; PRIOR FILING DATE: 2002-12-23

; PRIOR APPLICATION NUMBER: US 10/176,883

; PRIOR FILING DATE: 2002-06-21

; PRIOR APPLICATION NUMBER: US 10/177,826

; PRIOR FILING DATE: 2002-06-21

; PRIOR APPLICATION NUMBER: US 60/299,883

; PRIOR FILING DATE: 2001-06-21

; PRIOR APPLICATION NUMBER: US 60/375,253

; PRIOR FILING DATE: 2002-04-23

; NUMBER OF SEQ ID NOS: 158

; SOFTWARE: FastSeq for Windows Version 4.0

; SEQ ID NO 18

; LENGTH: 10

; TYPE: DNA

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Synthetic construct

US-10-623-371-18

Query Match 68.0%; Score 6.8; DB 19; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGRKTCG 10
: |||||
Db 9 GAACGGTTCG 1

RESULT 99

US-10-623-371-19

; Sequence 19, Application US/10623371

; Publication No. US20040132677A1

; GENERAL INFORMATION:

; APPLICANT: FEARON, Karen L.

; APPLICANT: DINA, Dino

; APPLICANT: TUCK, Stephen F.

; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND

; TITLE OF INVENTION: METHODS OF USING THE SAME-IV

; FILE REFERENCE: 377882002021

; CURRENT APPLICATION NUMBER: US/10/623,371

; CURRENT FILING DATE: 2003-07-18

; PRIOR APPLICATION NUMBER: US 10/328,578

; PRIOR FILING DATE: 2002-12-23

; PRIOR APPLICATION NUMBER: US 10/176,883

; PRIOR FILING DATE: 2002-06-21

; PRIOR APPLICATION NUMBER: US 10/177,826

; PRIOR FILING DATE: 2002-06-21

; PRIOR APPLICATION NUMBER: US 60/299,883

; PRIOR FILING DATE: 2001-06-21

; PRIOR APPLICATION NUMBER: US 60/375,253

; PRIOR FILING DATE: 2002-04-23

; NUMBER OF SEQ ID NOS: 158

; SOFTWARE: FastSeq for Windows Version 4.0

; SEQ ID NO 19

; LENGTH: 10

; TYPE: DNA

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Synthetic construct

US-10-623-371-20

; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-IV

; FILE REFERENCE: 377882002021

; CURRENT APPLICATION NUMBER: US/10/623,371

; CURRENT FILING DATE: 2003-07-18

; PRIOR APPLICATION NUMBER: US 10/328,578

; PRIOR FILING DATE: 2002-12-23

; PRIOR APPLICATION NUMBER: US 10/176,883

; PRIOR FILING DATE: 2002-06-21

; PRIOR APPLICATION NUMBER: US 10/177,826

; PRIOR FILING DATE: 2002-06-21

; PRIOR APPLICATION NUMBER: US 60/299,883

; PRIOR FILING DATE: 2001-06-21

; PRIOR APPLICATION NUMBER: US 60/375,253

; PRIOR FILING DATE: 2002-04-23

; NUMBER OF SEQ ID NOS: 158

; SOFTWARE: FastSeq for Windows Version 4.0

; SEQ ID NO 19

; LENGTH: 10

; TYPE: DNA

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Synthetic construct

; NAME/KEY: variation

; LOCATION: 1

; OTHER INFORMATION: n = 5-bromocytosine

US-10-623-371-19

Query Match 68.0%; Score 6.8; DB 19; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGRKTCG 10
: |||||
Db 2 GACCGTTCG 10

RESULT 100

US-10-623-371-20

; Sequence 20, Application US/10623371

; Publication No. US20040132677A1

; GENERAL INFORMATION:

; APPLICANT: FEARON, Karen L.

; APPLICANT: DINA, Dino

; APPLICANT: TUCK, Stephen F.

; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-IV

; FILE REFERENCE: 377882002021

; CURRENT APPLICATION NUMBER: US/10/623,371

; CURRENT FILING DATE: 2003-07-18

; PRIOR APPLICATION NUMBER: US 10/328,578

; PRIOR FILING DATE: 2002-12-23

; PRIOR APPLICATION NUMBER: US 10/176,883

; PRIOR FILING DATE: 2002-06-21

; PRIOR APPLICATION NUMBER: US 10/177,826

; PRIOR FILING DATE: 2002-06-21

; PRIOR APPLICATION NUMBER: US 60/299,883

; PRIOR FILING DATE: 2001-06-21

; PRIOR APPLICATION NUMBER: US 60/375,253

; PRIOR FILING DATE: 2002-04-23

; NUMBER OF SEQ ID NOS: 158

; SOFTWARE: FastSeq for Windows Version 4.0

; SEQ ID NO 20

; LENGTH: 10

; TYPE: DNA

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Synthetic construct

US-10-623-371-20

Query Match 68.0%; Score 6.8; DB 19; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

Db 2 TAACGCTCG 10

Search completed: June 30, 2005, 03:50:46
Job time : 289.5 secs

GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

Run on: June 29, 2005, 16:33:43 ; Search time 219.5 Seconds
(without alignments)
269.692 Million cell updates/sec

Title: US-10-033-243-77

Perfect score: 10

Sequence: 1 cgaacgttcg 10

Scoring table: IDENTITY NUC

Gapop 10.0, Gapext 1.0

Searched: 4390206 seqs, 2959870667 residues

Total number of hits satisfying chosen parameters: 8780412

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 100 summaries

Database :

N_Geneseq_16Dec04:*

1: Geneseqn1980s:*

2: Geneseqn1990s:*

3: Geneseqn2000s:*

4: Geneseqn2001as:*

5: Geneseqn2001bs:*

6: Geneseqn2002as:*

7: Geneseqn2002bs:*

8: Geneseqn2003as:*

9: Geneseqn2003bs:*

10: Geneseqn2003cs:*

11: Geneseqn2003ds:*

12: Geneseqn2004as:*

13: Geneseqn2004bs:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | Query Match | Length | ID | Description |
|------------|-------|-------------|--------|----|--------------------|
| 1 | 10 | 100.0 | 10 | 6 | Abq75136 ISS immun |
| 2 | 10 | 100.0 | 10 | 6 | Abq75136 ISS immun |
| 3 | 10 | 100.0 | 10 | 9 | Abd88814 Chimeric |
| 4 | 10 | 100.0 | 10 | 9 | Abd88814 Chimeric |
| 5 | 10 | 100.0 | 10 | 12 | Adk67580 Immunost |
| 6 | 10 | 100.0 | 10 | 12 | Adk67580 Immunost |
| 7 | 10 | 100.0 | 10 | 12 | Adk67584 Immunost |
| 8 | 10 | 100.0 | 10 | 12 | Adk67584 Immunost |
| 9 | 10 | 100.0 | 10 | 12 | Adq95321 Branched |
| 10 | 10 | 100.0 | 10 | 12 | Adq95321 Branched |
| 11 | 10 | 100.0 | 10 | 12 | Adq95322 Branched |
| 12 | 10 | 100.0 | 10 | 12 | Adq95322 Branched |
| 13 | 10 | 100.0 | 10 | 12 | Adq95323 Branched |
| 14 | 10 | 100.0 | 10 | 12 | Adq95323 Branched |
| 15 | 10 | 100.0 | 10 | 12 | Adq95277 Branched |
| 16 | 10 | 100.0 | 10 | 12 | Adq95277 Branched |
| 17 | 10 | 100.0 | 10 | 12 | Adq95275 Branched |
| 18 | 10 | 100.0 | 10 | 12 | Adq95275 Branched |
| 19 | 10 | 100.0 | 11 | 6 | Abq75229 ISS immun |
| 20 | 10 | 100.0 | 11 | 6 | Abq75229 ISS immun |

| | | | | | | |
|----|----|-------|----|----|----------|--------------------|
| 21 | 10 | 100.0 | 11 | 9 | AdB88900 | AdB88900 Chimeric |
| 22 | 10 | 100.0 | 11 | 9 | AdB88900 | AdB88900 Chimeric |
| 23 | 10 | 100.0 | 11 | 12 | AdQ95385 | AdQ95385 Branched |
| 24 | 10 | 100.0 | 11 | 12 | AdQ95385 | AdQ95385 Branched |
| 25 | 10 | 100.0 | 11 | 12 | AdQ95388 | AdQ95388 Branched |
| 26 | 10 | 100.0 | 11 | 12 | AdQ95388 | AdQ95388 Branched |
| 27 | 10 | 100.0 | 11 | 12 | AdQ95361 | AdQ95361 Branched |
| 28 | 10 | 100.0 | 11 | 12 | AdQ95361 | AdQ95361 Branched |
| 29 | 10 | 100.0 | 11 | 12 | AdQ95376 | AdQ95376 Branched |
| 30 | 10 | 100.0 | 11 | 12 | AdQ95376 | AdQ95376 Branched |
| 31 | 10 | 100.0 | 11 | 12 | AdQ95387 | AdQ95387 Branched |
| 32 | 10 | 100.0 | 11 | 12 | AdQ95387 | AdQ95387 Branched |
| 33 | 10 | 100.0 | 11 | 13 | AdQ16825 | AdQ16825 Immunomod |
| 34 | 10 | 100.0 | 11 | 13 | AdQ16825 | AdQ16825 Immunomod |
| 35 | 10 | 100.0 | 12 | 12 | AdQ95393 | AdQ95393 Branched |
| 36 | 10 | 100.0 | 12 | 12 | AdQ95393 | AdQ95393 Branched |
| 37 | 10 | 100.0 | 12 | 13 | AdQ16824 | AdQ16824 Immunomod |
| 38 | 10 | 100.0 | 12 | 13 | AdQ16824 | AdQ16824 Immunomod |
| 39 | 10 | 100.0 | 13 | 5 | AbC16000 | AbC16000 Oligonucl |
| 40 | 10 | 100.0 | 13 | 5 | AbC16000 | AbC16000 Oligonucl |
| 41 | 10 | 100.0 | 13 | 5 | AbC16001 | AbC16001 Oligonucl |
| 42 | 10 | 100.0 | 13 | 5 | AbC16001 | AbC16001 Oligonucl |
| 43 | 10 | 100.0 | 13 | 6 | AbQ75224 | AbQ75224 ISS immun |
| 44 | 10 | 100.0 | 13 | 6 | AbQ75224 | AbQ75224 ISS immun |
| 45 | 10 | 100.0 | 13 | 6 | AbQ75225 | AbQ75225 ISS immun |
| 46 | 10 | 100.0 | 13 | 6 | AbQ75225 | AbQ75225 ISS immun |
| 47 | 10 | 100.0 | 13 | 12 | AdQ95397 | AdQ95397 Branched |
| 48 | 10 | 100.0 | 13 | 12 | AdQ95397 | AdQ95397 Branched |
| 49 | 10 | 100.0 | 13 | 13 | AdQ16823 | AdQ16823 Immunomod |
| 50 | 10 | 100.0 | 13 | 13 | AdQ16823 | AdQ16823 Immunomod |
| 51 | 10 | 100.0 | 14 | 6 | AbQ75377 | AbQ75377 ISS immun |
| 52 | 10 | 100.0 | 14 | 6 | AbQ75377 | AbQ75377 ISS immun |
| 53 | 10 | 100.0 | 14 | 9 | AdB88895 | AdB88895 Chimeric |
| 54 | 10 | 100.0 | 14 | 9 | AdB88895 | AdB88895 Chimeric |
| 55 | 10 | 100.0 | 14 | 9 | AdB88901 | AdB88901 Chimeric |
| 56 | 10 | 100.0 | 14 | 9 | AdB88901 | AdB88901 Chimeric |
| 57 | 10 | 100.0 | 14 | 12 | AdK67588 | AdK67588 Immunost |
| 58 | 10 | 100.0 | 14 | 12 | AdK67588 | AdK67588 Immunost |
| 59 | 10 | 100.0 | 14 | 12 | AdQ95381 | AdQ95381 Branched |
| 60 | 10 | 100.0 | 14 | 12 | AdQ95381 | AdQ95381 Branched |
| 61 | 10 | 100.0 | 14 | 12 | AdQ95391 | AdQ95391 Branched |
| 62 | 10 | 100.0 | 14 | 12 | AdQ95391 | AdQ95391 Branched |
| 63 | 10 | 100.0 | 14 | 12 | AdQ95358 | AdQ95358 Branched |
| 64 | 10 | 100.0 | 14 | 12 | AdQ95358 | AdQ95358 Branched |
| 65 | 10 | 100.0 | 14 | 12 | AdQ95356 | AdQ95356 Branched |
| 66 | 10 | 100.0 | 14 | 12 | AdQ95356 | AdQ95356 Branched |
| 67 | 10 | 100.0 | 14 | 12 | AdQ95390 | AdQ95390 Branched |
| 68 | 10 | 100.0 | 14 | 12 | AdQ95390 | AdQ95390 Branched |
| 69 | 10 | 100.0 | 14 | 12 | AdQ95394 | AdQ95394 Branched |
| 70 | 10 | 100.0 | 14 | 12 | AdQ95394 | AdQ95394 Branched |
| 71 | 10 | 100.0 | 14 | 12 | AdQ95395 | AdQ95395 Branched |
| 72 | 10 | 100.0 | 14 | 12 | AdQ95395 | AdQ95395 Branched |
| 73 | 10 | 100.0 | 14 | 12 | AdQ95362 | AdQ95362 Branched |
| 74 | 10 | 100.0 | 14 | 12 | AdQ95362 | AdQ95362 Branched |
| 75 | 10 | 100.0 | 14 | 13 | AdQ16877 | AdQ16877 Immunomod |
| 76 | 10 | 100.0 | 14 | 13 | AdQ16877 | AdQ16877 Immunomod |
| 77 | 10 | 100.0 | 14 | 13 | AdQ16819 | AdQ16819 Immunomod |
| 78 | 10 | 100.0 | 14 | 13 | AdQ16819 | AdQ16819 Immunomod |
| 79 | 10 | 100.0 | 15 | 13 | AdQ16822 | AdQ16822 Immunomod |
| 80 | 10 | 100.0 | 15 | 13 | AdQ16822 | AdQ16822 Immunomod |
| 81 | 10 | 100.0 | 16 | 6 | AbQ75162 | AbQ75162 ISS immun |
| 82 | 10 | 100.0 | 16 | 6 | AbQ75162 | AbQ75162 ISS immun |
| 83 | 10 | 100.0 | 16 | 9 | AdB88830 | AdB88830 Chimeric |
| 84 | 10 | 100.0 | 16 | 9 | AdB88830 | AdB88830 Chimeric |
| 85 | 10 | 100.0 | 16 | 12 | AdK67587 | AdK67587 Immunost |
| 86 | 10 | 100.0 | 16 | 12 | AdK67587 | AdK67587 Immunost |
| 87 | 10 | 100.0 | 16 | 12 | AdQ95291 | AdQ95291 Branched |
| 88 | 10 | 100.0 | 16 | 12 | AdQ95291 | AdQ95291 Branched |
| 89 | 10 | 100.0 | 16 | 13 | AdQ16821 | AdQ16821 Immunomod |
| 90 | 10 | 100.0 | 16 | 13 | AdQ16821 | AdQ16821 Immunomod |
| 91 | 10 | 100.0 | 16 | 13 | AdQ16733 | AdQ16733 Immunomod |
| 92 | 10 | 100.0 | 16 | 13 | AdQ16733 | AdQ16733 Immunomod |
| 93 | 10 | 100.0 | 17 | 13 | AdQ16775 | AdQ16775 Immunomod |

C 94 10 100.0 17 13 ADQ16775 Adq16775 Immunomod
 C 95 10 100.0 18 6 ABQ75165 ABQ75165 ISS immun
 C 96 10 100.0 18 6 ABQ75165 ABQ75165 ISS immun
 C 97 10 100.0 18 9 ADB88833 Adb88833 Chimeric
 C 98 10 100.0 18 9 ADB88833 Adb88833 Chimeric
 C 99 10 100.0 18 12 ADQ95294 Adq95294 Branched
 C 100 10 100.0 18 12 ADQ95294 Adq95294 Branched

ALIGNMENTS

RESULT 1
 ABQ75136
 ID ABQ75136 standard; DNA; 10 BP.
 XX
 AC ABQ75136;
 XX
 XX 05-NOV-2002 (first entry)
 XX
 XX ISS immunomodulatory oligonucleotide SEQ ID NO:77.
 DE
 XX Immunostimulatory sequence; ISS: immunomodulatory; immune response;
 KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
 KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
 KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
 KW immunoglobulin E; IgE-related disorder; antiallergic; antiasthmatic;
 KW virucide; antibacterial; protozoacide; ss.
 XX
 OS Synthetic.
 XX
 XX WO200252002-A2.
 PN
 XX 04-JUL-2002.
 PD
 XX 27-DEC-2001; 2001WO-US050821.
 PF
 XX 27-DEC-2000; 2000US-0258675P.
 PR
 XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 PA
 XX Fearon KL, Dina D;
 PI
 XX WPI; 2002-657426/70.
 DR
 XX Immunomodulatory polynucleotide for modulating an immune response in a
 PT subject suffering from disorders associated with Th2-type immune
 PT response, e.g. allergy, or infectious disease, comprises an
 PT immunostimulatory sequence.
 XX
 XX Claim 3; Page 88; 95pp; English.
 PS
 XX The present invention describes an immunomodulatory polynucleotide (I)
 CC comprising an immunostimulatory sequence (ISS). Also described: (1) an
 CC immunomodulatory composition comprising (1); (2) an immunomodulatory
 CC polynucleotide/microcarrier (IMP/MC) complex, comprising (1) linked to a
 CC biodegradable MC, where the MC is less than 10 micrometre in size; and
 CC (3) a kit comprising (1). (1) has antiallergic, antiasthmatic, virucide,
 CC antibacterial and protozoacide activities, and can be used as a modulator
 CC of immune response. (1) is useful for modulating an immune response in an
 CC individual suffering from disorders associated with a Th2-type immune
 CC response, especially an allergy or asthma, or an infectious disease. (1)
 CC is also useful for increasing interferon-gamma (IFN-gamma) in an
 CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
 CC individual having a viral infection. (1) is further useful for
 CC ameliorating a symptom of an infectious disease caused by a cellular
 CC pathogen such as mycobacterial disease, malaria, leishmaniasis,
 CC toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a
 CC symptom of an immunoglobulin E (IgE)-related disorder, preferably an
 CC allergy-related disorder, in particular asthma in an individual. The
 CC present sequence represents an immunomodulatory oligonucleotide which is
 CC specifically claimed in the present invention
 XX

SQ Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;
 Query Match 100.0%; Score 10; DB 6; Length 10;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 CGAACGTTTCG 10
 Db 1 CGAACGTTTCG 10
 RESULT 2
 ABQ75136/c
 ID ABQ75136 standard; DNA; 10 BP.
 XX
 AC ABQ75136;
 XX
 XX 05-NOV-2002 (first entry)
 XX
 XX ISS immunomodulatory oligonucleotide SEQ ID NO:77.
 DE
 XX Immunostimulatory sequence; ISS: immunomodulatory; immune response;
 KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
 KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
 KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
 KW immunoglobulin E; IgE-related disorder; antiallergic; antiasthmatic;
 KW virucide; antibacterial; protozoacide; ss.
 XX
 OS Synthetic.
 XX
 XX WO200252002-A2.
 PN
 XX 04-JUL-2002.
 PD
 XX 27-DEC-2001; 2001WO-US050821.
 PF
 XX 27-DEC-2000; 2000US-0258675P.
 PR
 XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 PA
 XX Fearon KL, Dina D;
 PI
 XX WPI; 2002-657426/70.
 DR
 XX Immunomodulatory polynucleotide for modulating an immune response in a
 PT subject suffering from disorders associated with Th2-type immune
 PT response, e.g. allergy, or infectious disease, comprises an
 PT immunostimulatory sequence.
 XX
 XX Claim 3; Page 88; 95pp; English.
 PS
 XX The present invention describes an immunomodulatory polynucleotide (I)
 CC comprising an immunostimulatory sequence (ISS). Also described: (1) an
 CC immunomodulatory composition comprising (1); (2) an immunomodulatory
 CC polynucleotide/microcarrier (IMP/MC) complex, comprising (1) linked to a
 CC biodegradable MC, where the MC is less than 10 micrometre in size; and
 CC (3) a kit comprising (1). (1) has antiallergic, antiasthmatic, virucide,
 CC antibacterial and protozoacide activities, and can be used as a modulator
 CC of immune response. (1) is useful for modulating an immune response in an
 CC individual suffering from disorders associated with a Th2-type immune
 CC response, especially an allergy or asthma, or an infectious disease. (1)
 CC is also useful for increasing interferon-gamma (IFN-gamma) in an
 CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
 CC individual having a viral infection. (1) is further useful for
 CC ameliorating a symptom of an infectious disease caused by a cellular
 CC pathogen such as mycobacterial disease, malaria, leishmaniasis,
 CC toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a
 CC symptom of an immunoglobulin E (IgE)-related disorder, preferably an
 CC allergy-related disorder, in particular asthma in an individual. The
 CC present sequence represents an immunomodulatory oligonucleotide which is
 CC specifically claimed in the present invention
 XX
 SQ Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 6; Length 10;
Best Local Similarity 100.0%; Pred. No. 4.7e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
| | | | | | | | | |
Db 10 CGAACGTTTCG 1

RESULT 3

ADB88814

ID ADB88814 standard; DNA; 10 BP.

XX AC ADB88814;

XX DT 04-DEC-2003 (first entry)

XX DE Chimeric immunomodulatory compound DNA sequence, SEQ ID No 17.

XX KW chimeric immunomodulatory compound; CIC; immunomodulatory activity;
KW spacer moiety; linear hexaethylene glycol structure; HEG; immune;
KW Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma;
KW IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating;
KW immunoglobulin E; IgE; allergy; cancer;
KW stimulating cellular immune system cell; ss.

XX OS Synthetic.

XX PN WO200300922-A2.

XX XX 03-JAN-2003.

XX XX 21-JUN-2002; 2002WO-US020025.

XX XX 21-JUN-2001; 2001US-0299883P.

XX PR 23-APR-2002; 2002US-0375253P.

XX PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX PI Fearon KL, Dina D, Tuck SF;

XX XX WPI; 2003-210159/20.

XX KW Novel chimeric immunomodulatory compound having immunomodulatory
PT activity, useful for modulating an immune response and for treating
PT cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.

XX PS Disclosure; Page 33; 224pp; English.

XX CC The invention relates to a novel chimeric immunomodulatory compound (CIC)
CC having immunomodulatory activity, comprising two or more nucleic acid
CC moieties and one or more non-nucleic acid spacer moieties, where at least
CC one non-nucleic acid spacer moiety is covalently joined to two nucleic
CC acid moieties, where the spacer is not a polypeptide, and at least one
CC nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric
CC immunomodulatory compounds more specifically contain the nucleic acid
CC spacer moieties of linear hexaethylene glycol structure (HEG) subunits.
CC CIC's are useful for modulating an immune response in an individual,
CC where the individual suffers from a disorder associated with a Th2-type
CC immune response which is an allergy or allergy-induced asthma, and an
CC infectious disease. CIC is also useful for increasing IFN-gamma; or IFN-
CC alpha; in an individual, where the individual has idiopathic pulmonary
CC fibrosis, or a viral infection. CIC's are useful for ameliorating a
CC symptom of an infectious disease, or an immunoglobulin E (IgE)-related
CC disorder in an individual, where the IgE-related disorder is allergy, or
CC an allergy-related disorder. CIC's are also useful for treating cancer
CC and can be used for stimulating cellular immune system cells production
CC in an individual. This polynucleotide sequence represents a DNA sequence
CC which is a nucleic acid moiety part of a chimeric immunomodulatory compound
CC of the invention.

XX SQ Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 9; Length 10;
Best Local Similarity 100.0%; Pred. No. 4.7e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
| | | | | | | | | |
Db 1 CGAACGTTTCG 10

RESULT 4

ADB88814/c

ID ADB88814 standard; DNA; 10 BP.

XX AC ADB88814;

XX DT 04-DEC-2003 (first entry)

XX DE Chimeric immunomodulatory compound DNA sequence, SEQ ID No 17.

XX KW chimeric immunomodulatory compound; CIC; immunomodulatory activity;
KW spacer moiety; linear hexaethylene glycol structure; HEG; immune;
KW Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma;
KW IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating;
KW immunoglobulin E; IgE; allergy; cancer;
KW stimulating cellular immune system cell; ss.

XX OS Synthetic.

XX PN WO200300922-A2.

XX XX 03-JAN-2003.

XX XX 21-JUN-2002; 2002WO-US020025.

XX XX 21-JUN-2001; 2001US-0299883P.

XX PR 23-APR-2002; 2002US-0375253P.

XX PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX PI Fearon KL, Dina D, Tuck SF;

XX XX WPI; 2003-210159/20.

XX KW Novel chimeric immunomodulatory compound having immunomodulatory
PT activity, useful for modulating an immune response and for treating
PT cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.

XX PS Disclosure; Page 33; 224pp; English.

XX CC The invention relates to a novel chimeric immunomodulatory compound (CIC)
CC having immunomodulatory activity, comprising two or more nucleic acid
CC moieties and one or more non-nucleic acid spacer moieties, where at least
CC one non-nucleic acid spacer moiety is covalently joined to two nucleic
CC acid moieties, where the spacer is not a polypeptide, and at least one
CC nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric
CC immunomodulatory compounds more specifically contain the nucleic acid
CC spacer moieties of linear hexaethylene glycol structure (HEG) subunits.
CC CIC's are useful for modulating an immune response in an individual,
CC where the individual suffers from a disorder associated with a Th2-type
CC immune response which is an allergy or allergy-induced asthma, and an
CC infectious disease. CIC is also useful for increasing IFN-gamma; or IFN-
CC alpha; in an individual, where the individual has idiopathic pulmonary
CC fibrosis, or a viral infection. CIC's are useful for ameliorating a
CC symptom of an infectious disease, or an immunoglobulin E (IgE)-related
CC disorder in an individual, where the IgE-related disorder is allergy, or
CC an allergy-related disorder. CIC's are also useful for treating cancer
CC and can be used for stimulating cellular immune system cells production
CC in an individual. This polynucleotide sequence represents a DNA sequence
CC which is a nucleic acid moiety part of a chimeric immunomodulatory compound
CC of the invention.

XX SQ Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 9; Length 10;
Best Local Similarity 100.0%; Pred. No. 4.7e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
|||||
Db 10 CGAACGTTTCG 1

RESULT 5

ID ADK67580 standard; DNA; 10 BP.
XX
AC ADK67580;
XX
DT 06-MAY-2004 (first entry)
XX
DE Immunostimulant oligonucleotide used in immunomodulatory composition.
XX
KW Immunomodulator; immunostimulant; vaccine; DNA-RNA hybrid; ss.
XX
OS Synthetic.
XX
PH Key Location/Qualifiers
FT modified_base 1 /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 5-bromocytosine"
FT modified_base 5
FT /*tag= b
FT /mod_base= OTHER
FT /note= "OTHER= 5-bromocytosine"
XX
PN WO2004014322-A2.
XX
PD 19-FEB-2004.
XX
PF 12-AUG-2003; 2003WO-US025415.
XX
PR 12-AUG-2002; 2002US-0402968P.
XX
PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.
XX
PI Van Nest G, Tuck S;
XX
DR WPI; 2004-238627/22.
XX
PT Immunomodulatory composition useful for modulating immune responses in
PT individuals, comprises immunomodulatory particles or a particulate
PT composition made by mixing cationic condensing agent and an
PT immunomodulatory compound.
XX
PS Disclosure; SEQ ID NO 10; 90pp; English.
XX

CC The present sequence is that of an immunomodulatory compound (IMC) that
CC can be used in novel immunomodulatory compositions of the invention. The
CC IMC may contain modifications of the 3'OH or 5'OH group, the nucleotide
CC base, the sugar component and phosphate group. Novel immunomodulatory
CC compositions of the invention comprise a cationic condensing agent, an
CC IMC comprising the nucleotide sequence 5'-CG-3', and a stabilising agent.
CC The compositions form particles which have increased immunomodulatory
CC activity as compared to IMCs not formulated in the compositions of the
CC invention. The immunomodulatory compositions can be used for
CC immunomodulation of an individual, e.g. when the individual suffers from
CC a disorder associated with a Th2-type immune response (e.g. allergies or
CC allergy-induced asthma), is receiving vaccines such as therapeutic
CC vaccines (e.g. vaccines comprising an allergy epitope, a mycobacterial
CC epitope or a tumour associated epitope) or prophylactic vaccines, suffers
CC from cancer, suffers from an infectious disease or is at risk of exposure
CC to an infectious agent.
XX

Sequence 10 BP; 2 A; 3 C; 3 G; 1 T; 1 U; 0 Other;

Query Match 100.0%; Score 10; DB 12; Length 10;
Best Local Similarity 90.0%; Pred. No. 4.7e+03;
Matches 9; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
|||||
Db 1 CGAACGTTTCG 10

RESULT 6

ID ADK67580/c
XX
AC ADK67580;
XX
DT 06-MAY-2004 (first entry)
XX
DE Immunostimulant oligonucleotide used in immunomodulatory composition.
XX
KW Immunomodulator; immunostimulant; vaccine; DNA-RNA hybrid; ss.
XX
OS Synthetic.
XX
PH Key Location/Qualifiers
FT modified_base 1 /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 5-bromocytosine"
FT modified_base 5
FT /*tag= b
FT /mod_base= OTHER
FT /note= "OTHER= 5-bromocytosine"
XX
PN WO2004014322-A2.
XX
PD 19-FEB-2004.
XX
PF 12-AUG-2003; 2003WO-US025415.
XX
PR 12-AUG-2002; 2002US-0402968P.
XX
PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.
XX
PI Van Nest G, Tuck S;
XX
DR WPI; 2004-238627/22.
XX
PT Immunomodulatory composition useful for modulating immune responses in
PT individuals, comprises immunomodulatory particles or a particulate
PT composition made by mixing cationic condensing agent and an
PT immunomodulatory compound.
XX
PS Disclosure; SEQ ID NO 10; 90pp; English.
XX

CC The present sequence is that of an immunomodulatory compound (IMC) that
CC can be used in novel immunomodulatory compositions of the invention. The
CC IMC may contain modifications of the 3'OH or 5'OH group, the nucleotide
CC base, the sugar component and phosphate group. Novel immunomodulatory
CC compositions of the invention comprise a cationic condensing agent, an
CC IMC comprising the nucleotide sequence 5'-CG-3', and a stabilising agent.
CC The compositions form particles which have increased immunomodulatory
CC activity as compared to IMCs not formulated in the compositions of the
CC invention. The immunomodulatory compositions can be used for
CC immunomodulation of an individual, e.g. when the individual suffers from
CC a disorder associated with a Th2-type immune response (e.g. allergies or
CC allergy-induced asthma), is receiving vaccines such as therapeutic
CC vaccines (e.g. vaccines comprising an allergy epitope, a mycobacterial
CC epitope or a tumour associated epitope) or prophylactic vaccines, suffers
CC from cancer, suffers from an infectious disease or is at risk of exposure
CC to an infectious agent.
XX

Sequence 10 BP; 2 A; 3 C; 3 G; 1 T; 1 U; 0 Other;

Query Match 100.0%; Score 10; DB 12; Length 10;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
 |||||
 DB 10 CGAACGTTTCG 1

RESULT 7

ADK67584
 ID ADK67584 standard; DNA; 10 BP.
 AC ADK67584;
 XX
 XX
 DT 06-MAY-2004 (first entry)
 DE Immunostimulant oligonucleotide used in immunomodulatory composition.
 KW Immunostimulant; immunostimulant; vaccine; ss.
 XX Synthetic.
 OS
 XX WO2004014322-A2.
 PN
 PD 19-FEB-2004.
 XX
 XX 12-AUG-2003; 2003WO-US025415.
 PF
 XX 12-AUG-2002; 2002US-0402968P.
 PR
 XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 PA
 XX Van Nest G, Tuck S;
 PI
 XX WPI; 2004-238627/22.
 DR

XX Immunomodulatory composition useful for modulating immune responses in
 PT individuals, comprises immunomodulatory particles or a particulate
 PT composition made by mixing cationic condensing agent and an
 PT immunomodulatory compound.
 XX
 PS Disclosure; SEQ ID NO 14; 90pp; English.
 XX
 CC The present sequence is that of an immunomodulatory compound (IMC) that
 CC can be used in novel immunomodulatory compositions of the invention. The
 CC IMC may contain modifications of the 3'OH or 5'OH group, the nucleotide
 CC base, the sugar component and phosphate group. Novel immunomodulatory
 CC compositions of the invention comprise a cationic condensing agent, an
 CC IMC comprising the nucleotide sequence 5'-CG-3', and a stabilising agent.
 CC The compositions form particles which have increased immunomodulatory
 CC activity as compared to IMCs not formulated in the compositions of the
 CC invention. The immunomodulatory compositions can be used for
 CC immunomodulation of an individual, e.g. when the individual suffers from
 CC a disorder associated with a Th2-type immune response (e.g. allergies or
 CC allergy-induced asthma), is receiving vaccines such as therapeutic
 CC vaccines (e.g. vaccines comprising an allergy epitope, a mycobacterial
 CC epitope or a tumour associated epitope) or prophylactic vaccines, suffers
 CC from cancer, suffers from an infectious disease or is at risk of exposure
 CC to an infectious agent.
 XX
 SQ Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 12; Length 10;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
 |||||
 DB 1 CGAACGTTTCG 10

RESULT 8

ADK67584/c
 ID ADK67584 standard; DNA; 10 BP.
 XX
 AC ADK67584;
 XX
 DT 06-MAY-2004 (first entry)
 DE Immunostimulant oligonucleotide used in immunomodulatory composition.
 KW Immunostimulant; immunostimulant; vaccine; ss.
 XX Immunomodulator.
 OS Synthetic.
 XX WO2004014322-A2.
 PN
 PD 19-FEB-2004.
 XX
 XX 12-AUG-2003; 2003WO-US025415.
 PF
 XX 12-AUG-2002; 2002US-0402968P.
 PR
 XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 PA
 XX Van Nest G, Tuck S;
 PI
 XX WPI; 2004-238627/22.
 DR

XX Immunomodulatory composition useful for modulating immune responses in
 PT individuals, comprises immunomodulatory particles or a particulate
 PT composition made by mixing cationic condensing agent and an
 PT immunomodulatory compound.
 XX
 PS Disclosure; SEQ ID NO 14; 90pp; English.
 XX
 CC The present sequence is that of an immunomodulatory compound (IMC) that
 CC can be used in novel immunomodulatory compositions of the invention. The
 CC IMC may contain modifications of the 3'OH or 5'OH group, the nucleotide
 CC base, the sugar component and phosphate group. Novel immunomodulatory
 CC compositions of the invention comprise a cationic condensing agent, an
 CC IMC comprising the nucleotide sequence 5'-CG-3', and a stabilising agent.
 CC The compositions form particles which have increased immunomodulatory
 CC activity as compared to IMCs not formulated in the compositions of the
 CC invention. The immunomodulatory compositions can be used for
 CC immunomodulation of an individual, e.g. when the individual suffers from
 CC a disorder associated with a Th2-type immune response (e.g. allergies or
 CC allergy-induced asthma), is receiving vaccines such as therapeutic
 CC vaccines (e.g. vaccines comprising an allergy epitope, a mycobacterial
 CC epitope or a tumour associated epitope) or prophylactic vaccines, suffers
 CC from cancer, suffers from an infectious disease or is at risk of exposure
 CC to an infectious agent.
 XX
 SQ Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 12; Length 10;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
 |||||
 DB 10 CGAACGTTTCG 1

RESULT 9

ADQ95321
 ID ADQ95321 standard; DNA; 10 BP.
 XX
 AC ADQ95321;
 XX
 DT 07-OCT-2004 (first entry)
 DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 63.
 XX

KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 5
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "c= 5-bromocytosine"
 XX
 PN WO2004058159-A2.
 XX
 XX 15-JUL-2004.
 XX
 XX 17-DEC-2003; 2003WO-US040417.
 XX
 XX 23-DEC-2002; 2002US-0436406P.
 XX
 XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 XX
 XX Fearon KU;
 XX WPI; 2004-561515/54.
 XX
 XX New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.
 XX
 PS Disclosure; SEQ ID NO 63; 183pp; English.
 XX
 XX The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IGE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marium or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 SQ Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 12; Length 10;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
 Db |||||
 1 CGAACGTTTCG 10
 RESULT 10
 ADQ95321/c
 ID ADQ95321 standard; DNA; 10 BP.
 XX
 AC ADQ95321;
 XX
 XX 07-OCT-2004 (first entry)
 XX
 XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 63.
 XX
 KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 5
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "c= 5-bromocytosine"
 XX
 PN WO2004058159-A2.
 XX
 XX 15-JUL-2004.
 XX
 XX 17-DEC-2003; 2003WO-US040417.
 XX
 XX 23-DEC-2002; 2002US-0436406P.
 XX
 XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 XX
 XX Fearon KU;
 XX WPI; 2004-561515/54.
 XX
 XX New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.
 XX
 PS Disclosure; SEQ ID NO 63; 183pp; English.
 XX
 XX The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IGE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marium or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 SQ Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;

CC The present invention relates to novel branched immunomodulatory
CC compounds (BIC) comprising at least three nucleic acid moieties, at least
CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one

PF 17-DEC-2003; 2003WO-US040417.
XX
PR 23-DEC-2002; 2002US-0436406P.
XX
XX (DYNA-) DYNAXX TECHNOLOGIES CORP.
PA
PI Fearon KL;
XX
DR WPI; 2004-561515/54.
XX
XX New branched immunomodulatory compound comprising at least three nucleic acid moieties and at least one branch-point nucleoside, useful for modulating an immune response in individual suffering e.g. allergy.
PT
PT
XX
XX Disclosure; SEQ ID NO 64; 183pp; English.
XX
CC The present invention relates to novel branched immunomodulatory compounds (BIC) comprising at least three nucleic acid moieties, at least one of which comprises the nucleotide sequence 5'-CG-3', and at least one branch-point nucleoside. The BIC compounds has immunomodulatory activity e.g. the ability to stimulate interferon (IFN)-gamma production from human peripheral blood mononuclear cells, the ability to stimulate IFN-alpha production from human peripheral blood mononuclear cells and the ability to stimulate B cell proliferation. The BIC compounds are useful for modulating an immune response in an individual suffering from a disorder associated with a T helper (Th)2-type immune response e.g. allergy, allergy-induced asthma or an infectious disease; for increasing secretion of IFN-gamma by blood cells in an individual. The BIC compounds are also useful for immunomodulation of cells and individuals; in the fields of biomedicine and immunology; for the manufacture of a medicament ; for treating idiopathic pulmonary fibrosis, viral infection (e.g. hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for ameliorating an IGE-related disorder in an individual. The disorders includes atopic dermatitis, eosinophilic gastrointestinal inflammation, eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis; cancer; infectious disease resistant to humoral immune responses (e.g. diseases caused by mycobacterial infections and intracellular pathogens, cellular pathogens e.g. bacteria or protozoans or by subcellular pathogens e.g. viruses); mycobacterial diseases such as tuberculosis, leprosy or M. marinum or M. ulcerans infections; herpes viruses; diseases caused by intracellular parasites such as malaria; leishmaniasis, toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-induced fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in the BIC compounds of the invention.
XX
SQ Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;
Query Match 100.0%; Score 10; DB 12; Length 10;
Best Local Similarity 100.0%; Pred. No. 4.7e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
Db 10 CGAACGTTTCG 1
RESULT 13
ADQ95323
ID ADQ95323 standard; DNA; 10 BP.
XX
AC ADQ95323;
XX
XX 07-OCT-2004 (first entry)
DT
XX
DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 65.
XX
KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory; Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
KW Tuberculostatic; Antileprotic; Antiparasitic; Animalarial; Antiulcer;
KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;

KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha; IFN-alpha; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
XX modified_base 1 /*tag= a
FT /mod_base= OTHER
FT /note= "c= 5-bromocytosine"
FT modified_base 5
FT /tag= b
FT /mod_base= OTHER
FT /note= "c= 5-bromocytosine"
XX
XX WO2004058159-A2.
PN
XX
XX 15-JUL-2004.
XX
XX 17-DEC-2003; 2003WO-US040417.
PF
XX
XX 23-DEC-2002; 2002US-0436406P.
PR
XX
XX (DYNA-) DYNAXX TECHNOLOGIES CORP.
PA
PI Fearon KL;
XX
DR WPI; 2004-561515/54.
XX
XX New branched immunomodulatory compound comprising at least three nucleic acid moieties and at least one branch-point nucleoside, useful for modulating an immune response in individual suffering e.g. allergy.
PT
PT
XX
XX Disclosure; SEQ ID NO 65; 183pp; English.
XX
CC The present invention relates to novel branched immunomodulatory compounds (BIC) comprising at least three nucleic acid moieties, at least one of which comprises the nucleotide sequence 5'-CG-3', and at least one branch-point nucleoside. The BIC compounds has immunomodulatory activity e.g. the ability to stimulate interferon (IFN)-gamma production from human peripheral blood mononuclear cells, the ability to stimulate IFN-alpha production from human peripheral blood mononuclear cells and the ability to stimulate B cell proliferation. The BIC compounds are useful for modulating an immune response in an individual suffering from a disorder associated with a T helper (Th)2-type immune response e.g. allergy, allergy-induced asthma or an infectious disease; for increasing secretion of IFN-gamma by blood cells in an individual. The BIC compounds are also useful for immunomodulation of cells and individuals; in the fields of biomedicine and immunology; for the manufacture of a medicament ; for treating idiopathic pulmonary fibrosis, viral infection (e.g. hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for ameliorating an IGE-related disorder in an individual. The disorders includes atopic dermatitis, eosinophilic gastrointestinal inflammation, eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis; cancer; infectious disease resistant to humoral immune responses (e.g. diseases caused by mycobacterial infections and intracellular pathogens, cellular pathogens e.g. bacteria or protozoans or by subcellular pathogens e.g. viruses); mycobacterial diseases such as tuberculosis, leprosy or M. marinum or M. ulcerans infections; herpes viruses; diseases caused by intracellular parasites such as malaria; leishmaniasis, toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-induced fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in the BIC compounds of the invention.
XX
SQ Sequence 10 BP; 2 A; 3 C; 3 G; 1 T; 1 U; 0 Other;
Query Match 100.0%; Score 10; DB 12; Length 10;
Best Local Similarity 90.0%; Pred. No. 4.7e+03;
Matches 9; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10

```

Db      1 CGAACGTCG 10
RESULT 14
ADQ95323/c
ID      ADQ95323 standard; DNA; 10 BP.
XX
AC      ADQ95323;
XX
DT      07-OCT-2004 (first entry)
XX
DE      Branched immunomodulatory compound related oligonucleotide, SEQ ID 65.
XX
KW      Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
KW      Virucide; Antiinflammatory; Hepatotrophic; Anti-HIV; Auditory;
KW      Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
KW      Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
KW      Gastrointestinal; Nephrotropic; Branched immunomodulatory compound;
KW      Immunomodulatory; Interferon-gamma; IFN-gamma; interferon-alpha;
KW      IFN-alpha; ss.
XX
OS      Synthetic.
XX
FH      Key      Location/Qualifiers
FT      modified_base 1 /*tag= a
FT      /mod_base= OTHER
FT      /note= "c= 5-bromocytosine"
FT      modified_base 5
FT      /*tag= b
FT      /mod_base= OTHER
FT      /note= "c= 5-bromocytosine"
XX
PN      WO2004058159-A2.
XX
PD      15-JUL-2004.
XX
PF      17-DEC-2003; 2003WO-US040417.
XX
PR      23-DEC-2002; 2002US-0436406P.
XX
PA      (DYNA-) DYNAVAX TECHNOLOGIES CORP.
XX
PI      Fearon KL;
XX
DR      WPI; 2004-561515/54.
XX
PT      New branched immunomodulatory compound comprising at least three nucleic
PT      acid moieties and at least one branch-point nucleoside, useful for
PT      modulating an immune response in individual suffering e.g. allergy.
XX
PS      Disclosure; SEQ ID NO 65; 183pp; English.
XX
CC      The present invention relates to novel branched immunomodulatory
CC      compounds (BIC) comprising at least three nucleic acid moieties, at least
CC      one of which comprises the nucleotide sequence 5'-CG-3', and at least one
CC      branch-point nucleoside. The BIC compounds has immunomodulatory activity
CC      e.g. the ability to stimulate interferon (IFN)-gamma production from
CC      human peripheral blood mononuclear cells, the ability to stimulate IFN-
CC      alpha production from human peripheral blood mononuclear cells and the
CC      ability to stimulate B cell proliferation. The BIC compounds are useful
CC      for modulating an immune response in an individual suffering from a
CC      disorder associated with a T helper (Th)2-type immune response e.g.
CC      allergy, allergy-induced asthma or an infectious disease; for increasing
CC      secretion of IFN-gamma by blood cells in an individual. The BIC compounds
CC      are also useful for immunomodulation of cells and individuals; in the
CC      fields of biomedicine and immunology; for the manufacture of a medicament
CC      ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
CC      hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
CC      ameliorating an Igs-related disorder in an individual. The disorders
CC      includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
CC      eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;

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CC      cancer; infectious disease resistant to humoral immune responses (e.g.
CC      diseases caused by mycobacterial infections and intracellular pathogens,
CC      cellular pathogens e.g. bacteria or protozoans or by subcellular
CC      pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
CC      leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
CC      caused by intracellular parasites such as malaria; leishmaniasis,
CC      toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
CC      disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
CC      induced fibrosis, hepatic fibrosis including schistosomiasis-induced
CC      hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
CC      the BIC compounds of the invention.
XX
SQ      Sequence 10 BP; 2 A; 3 C; 3 G; 1 T; 1 U; 0 Other;
XX
Query Match      100.0%; Score 10; DB 12; Length 10;
Best Local Similarity 100.0%; Pred. No. 4.7e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy      1 CGAACGTCG 10
Db      10 CGAACGTCG 1
RESULT 15
ADQ95277
ID      ADQ95277 standard; DNA; 10 BP.
XX
AC      ADQ95277;
XX
DT      07-OCT-2004 (first entry)
XX
DE      Branched immunomodulatory compound related oligonucleotide, SEQ ID 19.
XX
KW      Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
KW      Virucide; Antiinflammatory; Hepatotrophic; Anti-HIV; Auditory;
KW      Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
KW      Gastrointestinal; Nephrotropic; Branched immunomodulatory compound;
KW      Immunomodulatory; Interferon-gamma; IFN-gamma; interferon-alpha;
KW      IFN-alpha; ss.
XX
OS      Synthetic.
XX
FH      Key      Location/Qualifiers
FT      modified_base 1 /*tag= a
FT      /mod_base= OTHER
FT      /note= "c= 5-bromocytosine"
FT      modified_base 5
FT      /*tag= b
FT      /mod_base= OTHER
FT      /note= "c= 5-bromocytosine"
XX
PN      WO2004058159-A2.
XX
PD      15-JUL-2004.
XX
PF      17-DEC-2003; 2003WO-US040417.
XX
PR      23-DEC-2002; 2002US-0436406P.
XX
PA      (DYNA-) DYNAVAX TECHNOLOGIES CORP.
XX
PI      Fearon KL;
XX
DR      WPI; 2004-561515/54.
XX
PT      New branched immunomodulatory compound comprising at least three nucleic
PT      acid moieties and at least one branch-point nucleoside, useful for
PT      modulating an immune response in individual suffering e.g. allergy.
XX
PS      Disclosure; SEQ ID NO 19; 183pp; English.
XX
CC      The present invention relates to novel branched immunomodulatory
CC      compounds (BIC) comprising at least three nucleic acid moieties, at least
CC      one of which comprises the nucleotide sequence 5'-CG-3', and at least one
CC      branch-point nucleoside. The BIC compounds has immunomodulatory activity
CC      e.g. the ability to stimulate interferon (IFN)-gamma production from
CC      human peripheral blood mononuclear cells, the ability to stimulate IFN-
CC      alpha production from human peripheral blood mononuclear cells and the
CC      ability to stimulate B cell proliferation. The BIC compounds are useful
CC      for modulating an immune response in an individual suffering from a
CC      disorder associated with a T helper (Th)2-type immune response e.g.
CC      allergy, allergy-induced asthma or an infectious disease; for increasing
CC      secretion of IFN-gamma by blood cells in an individual. The BIC compounds
CC      are also useful for immunomodulation of cells and individuals; in the
CC      fields of biomedicine and immunology; for the manufacture of a medicament
CC      ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
CC      hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
CC      ameliorating an Igs-related disorder in an individual. The disorders
CC      includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
CC      eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;

```

CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IGE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses; mycobacterial diseases such as tuberculosis,
 CC leprosy or M. marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic colitis; schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.

XX Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 12; Length 10;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 CGAACGTTTCG 10
 Db 1 CGAACGTTTCG 10

RESULT 16
 ADQ95277/c
 ID ADQ95277 standard; DNA; 10 BP.

XX ADQ95277;
 XX 07-OCT-2004 (first entry)
 XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 19.
 XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 XX Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 XX Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 XX Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 XX Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 XX immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 XX IFN-alpha; ss.
 XX Synthetic.

XX Key Location/Qualifiers
 XX modified_base 1 /*tag= a
 XX /mod_base= OTHER
 XX /note= "C= 5-bromocytosine"

XX WO2004058159-A2.
 XX 15-JUL-2004.
 XX 17-DEC-2003; 2003WO-US040417.
 XX 23-DEC-2002; 2002US-0436406P.
 XX (DYNA-) DYNVAX TECHNOLOGIES CORP.

XX Fearon KL;
 XX WPI; 2004-561515/54.

XX New branched immunomodulatory compound comprising at least three nucleic
 XX acid moieties and at least one branch-point nucleoside, useful for
 XX modulating an immune response in individual suffering e.g. allergy.
 XX Disclosure; SEQ ID NO 19; 183pp; English.

XX The present invention relates to novel branched immunomodulatory
 XX compounds (BIC) comprising at least three nucleic acid moieties, at least
 XX one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 XX branch-point nucleoside. The BIC compounds has immunomodulatory activity
 XX e.g. the ability to stimulate interferon (IFN)-gamma production from
 XX human peripheral blood mononuclear cells, the ability to stimulate IFN-
 XX alpha production from human peripheral blood mononuclear cells and the
 XX ability to stimulate B cell proliferation. The BIC compounds are useful
 XX for modulating an immune response in an individual suffering from a
 XX disorder associated with a T helper (Th)2-type immune response e.g.
 XX allergy, allergy-induced asthma or an infectious disease; for increasing
 XX secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 XX are also useful for immunomodulation of cells and individuals; in the
 XX fields of biomedicine and immunology; for the manufacture of a medicament
 XX ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 XX hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 XX ameliorating an IGE-related disorder in an individual. The disorders
 XX includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 XX eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 XX cancer; infectious disease resistant to humoral immune responses (e.g.
 XX diseases caused by mycobacterial infections and intracellular pathogens,
 XX cellular pathogens e.g. bacteria or protozoans or by subcellular
 XX pathogens e.g. viruses; mycobacterial diseases such as tuberculosis,
 XX leprosy or M. marinum or M. ulcerans infections; herpes viruses; diseases
 XX caused by intracellular parasites such as malaria; leishmaniasis,
 XX toxoplasmosis; parasitic colitis; schistosomiasis; inflammatory
 XX disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 XX induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 XX hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 XX the BIC compounds of the invention.

XX Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 12; Length 10;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 Db 10 CGAACGTTTCG 1

RESULT 17
 ADQ95275

ID ADQ95275 standard; DNA; 10 BP.

XX ADQ95275;

XX 07-OCT-2004 (first entry)

XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 17.

XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 XX Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 XX Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 XX Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 XX Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 XX immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 XX IFN-alpha; ss.
 XX Synthetic.

PN WO2004058159-A2.
 PD 15-JUL-2004.
 PF 17-DEC-2003; 2003WO-US040417.
 XX 23-DEC-2002; 2002US-0436406P.
 XX
 PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 XX Fearon KL;
 XX WPI; 2004-561515/54.
 DR
 XX
 XX New branched immunomodulatory compound comprising at least three nucleic acid moieties and at least one branch-point nucleoside, useful for modulating an immune response in individual suffering e.g. allergy.
 PT
 PT
 XX
 PS Disclosure; SEQ ID NO 17; 183pp; English.
 XX
 CC The present invention relates to novel branched immunomodulatory compounds (BIC) comprising at least three nucleic acid moieties, at least one of which comprises the nucleotide sequence 5'-CG-3', and at least one branch-point nucleoside. The BIC compounds has immunomodulatory activity e.g. the ability to stimulate interferon (IFN)-gamma production from human peripheral blood mononuclear cells, the ability to stimulate IFN-alpha production from human peripheral blood mononuclear cells and the ability to stimulate B cell proliferation. The BIC compounds are useful for modulating an immune response in an individual suffering from a disorder associated with a T helper (Th)2-type immune response e.g. allergy, allergy-induced asthma or an infectious disease; for increasing secretion of IFN-gamma by blood cells in an individual. The BIC compounds are also useful for immunomodulation of cells and individuals; in the fields of biomedicine and immunology; for the manufacture of a medicament ; for treating idiopathic pulmonary fibrosis, viral infection (e.g. hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for ameliorating an IGE-related disorder in an individual. The disorders includes atopic dermatitis, eosinophilic gastrointestinal inflammation, eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis; cancer; infectious disease resistant to humoral immune responses (e.g. diseases caused by mycobacterial infections and intracellular pathogens, cellular pathogens e.g. bacteria or protozoans or by subcellular pathogens e.g. viruses); mycobacterial diseases such as tuberculosis, leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases caused by intracellular parasites such as malaria; leishmaniasis, toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-induced fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in the BIC compounds of the invention.
 XX
 SQ Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;
 Query Match 100.0%; Score 10; DB 12; Length 10;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 CGAACGTTTCG 10
 |||||
 Db 1 CGAACGTTTCG 10
 |||||
 RESULT 18
 ADQ95275/C
 ID ADQ95275 standard; DNA; 10 BP.
 XX
 AC ADQ95275;
 XX
 XX 07-OCT-2004 (first entry)
 DT
 XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 17.
 DE
 XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;

KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory; Dermatological; Immunosuppressive; Cytostatic; Protozoacide; Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antitumor; Gastrointestinal; Nephrotropic; branched immunomodulatory compound; immunomodulatory; interferon-gamma; IFN-gamma, interferon-alpha; IFN-alpha; BS.
 XX Synthetic.
 OS
 XX WO2004058159-A2.
 PN
 XX 15-JUL-2004.
 PD
 XX 17-DEC-2003; 2003WO-US040417.
 PF
 XX 23-DEC-2002; 2002US-0436406P.
 PR
 XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 PA
 XX Fearon KL;
 PI
 XX WPI; 2004-561515/54.
 DR
 XX
 XX New branched immunomodulatory compound comprising at least three nucleic acid moieties and at least one branch-point nucleoside, useful for modulating an immune response in individual suffering e.g. allergy.
 PT
 PT
 XX
 PS Disclosure; SEQ ID NO 17; 183pp; English.
 XX
 CC The present invention relates to novel branched immunomodulatory compounds (BIC) comprising at least three nucleic acid moieties, at least one of which comprises the nucleotide sequence 5'-CG-3', and at least one branch-point nucleoside. The BIC compounds has immunomodulatory activity e.g. the ability to stimulate interferon (IFN)-gamma production from human peripheral blood mononuclear cells, the ability to stimulate IFN-alpha production from human peripheral blood mononuclear cells and the ability to stimulate B cell proliferation. The BIC compounds are useful for modulating an immune response in an individual suffering from a disorder associated with a T helper (Th)2-type immune response e.g. allergy, allergy-induced asthma or an infectious disease; for increasing secretion of IFN-gamma by blood cells in an individual. The BIC compounds are also useful for immunomodulation of cells and individuals; in the fields of biomedicine and immunology; for the manufacture of a medicament ; for treating idiopathic pulmonary fibrosis, viral infection (e.g. hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for ameliorating an IGE-related disorder in an individual. The disorders includes atopic dermatitis, eosinophilic gastrointestinal inflammation, eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis; cancer; infectious disease resistant to humoral immune responses (e.g. diseases caused by mycobacterial infections and intracellular pathogens, cellular pathogens e.g. bacteria or protozoans or by subcellular pathogens e.g. viruses); mycobacterial diseases such as tuberculosis, leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases caused by intracellular parasites such as malaria; leishmaniasis, toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-induced fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in the BIC compounds of the invention.
 XX
 SQ Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 12; Length 10;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 CGAACGTTTCG 10
 |||||
 Db 10 CGAACGTTTCG 1
 |||||
 RESULT 19
 ABQ75229

ID ABQ75229 standard; DNA; 11 BP.
 XX AC
 XX ABQ75229;
 XX DT
 XX 05-NOV-2002 (first entry)
 XX DE
 XX ISS immunomodulatory oligonucleotide SEQ ID NO:102.
 XX KW
 XX Immunostimulatory sequence; ISS: immunomodulatory; immune response;
 KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
 KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
 KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
 KW immunoglobulin E; IgE-related disorder; antiallergic; antiasthmatic;
 KW virucide; antibacterial; protozoacide; ss.
 XX OS
 XX Synthetic.
 XX KW
 XX WO200252002-A2.
 XX PN
 XX 04-JUL-2002.
 XX PD
 XX 27-DEC-2001; 2001WO-US050821.
 XX PF
 XX 27-DEC-2000; 2000US-0258675P.
 XX PR
 XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 XX PA
 XX Fearon KL, Dina D;
 XX PI
 XX WPI; 2002-657426/70.
 XX DR
 XX Immunomodulatory polynucleotide for modulating an immune response in a
 PT subject suffering from disorders associated with Th2-type immune
 PT response, e.g. allergy, or infectious disease, comprises an
 PT immunostimulatory sequence.
 PT
 XX PS
 XX Disclosure; Page 24; 95pp; English.
 XX
 CC The present invention describes an immunomodulatory polynucleotide (I)
 CC comprising an immunostimulatory sequence (ISS). Also described: (1) an
 CC immunomodulatory composition comprising (I); (2) an immunomodulatory
 CC polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a
 CC biodegradable MC, where the MC is less than 10 micrometre in size; and
 CC (3) a kit comprising (I). (I) has antiallergic, antiasthmatic, virucide,
 CC antibacterial and protozoacide activities, and can be used as a modulator
 CC of immune response. (I) is useful for modulating an immune response in an
 CC individual suffering from disorders associated with a Th2-type immune
 CC response, especially an allergy or asthma, or an infectious disease. (I)
 CC is also useful for increasing interferon-gamma (IFN-gamma) in an
 CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
 CC ameliorating a symptom of an infectious disease caused by a cellular
 CC pathogen such as mycobacterial disease, malaria, leishmaniasis,
 CC toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a
 CC symptom of an immunoglobulin E (IgE)-related disorder, preferably an
 CC allergy-related disorder, in particular asthma in an individual. The
 CC present sequence represents an immunomodulatory oligonucleotide from the
 CC present invention
 CC
 XX SQ Sequence 11 BP; 2 A; 3 C; 3 G; 3 T; 0 U; 0 Other;
 Query Match 100.0%; Score 10; DB 6; Length 11;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 CGAACGTTTCG 10
 |||||
 Db 2 CGAACGTTTCG 11
 RESULT 20
 ABQ75229/c
 ID ABQ75229 standard; DNA; 11 BP.

XX ABQ75229;
 XX AC
 XX DT
 XX 05-NOV-2002 (first entry)
 XX DE
 XX ISS immunomodulatory oligonucleotide SEQ ID NO:102.
 XX KW
 XX Immunostimulatory sequence; ISS: immunomodulatory; immune response;
 KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
 KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
 KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
 KW immunoglobulin E; IgE-related disorder; antiallergic; antiasthmatic;
 KW virucide; antibacterial; protozoacide; ss.
 XX OS
 XX Synthetic.
 XX KW
 XX WO200252002-A2.
 XX PN
 XX 04-JUL-2002.
 XX PD
 XX 27-DEC-2001; 2001WO-US050821.
 XX PF
 XX 27-DEC-2000; 2000US-0258675P.
 XX PR
 XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 XX PA
 XX Fearon KL, Dina D;
 XX PI
 XX WPI; 2002-657426/70.
 XX DR
 XX Immunomodulatory polynucleotide for modulating an immune response in a
 PT subject suffering from disorders associated with Th2-type immune
 PT response, e.g. allergy, or infectious disease, comprises an
 PT immunostimulatory sequence.
 PT
 XX PS
 XX Disclosure; Page 24; 95pp; English.
 XX
 CC The present invention describes an immunomodulatory polynucleotide (I)
 CC comprising an immunostimulatory sequence (ISS). Also described: (1) an
 CC immunomodulatory composition comprising (I); (2) an immunomodulatory
 CC polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a
 CC biodegradable MC, where the MC is less than 10 micrometre in size; and
 CC (3) a kit comprising (I). (I) has antiallergic, antiasthmatic, virucide,
 CC antibacterial and protozoacide activities, and can be used as a modulator
 CC of immune response. (I) is useful for modulating an immune response in an
 CC individual suffering from disorders associated with a Th2-type immune
 CC response, especially an allergy or asthma, or an infectious disease. (I)
 CC is also useful for increasing interferon-gamma (IFN-gamma) in an
 CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
 CC ameliorating a symptom of an infectious disease caused by a cellular
 CC pathogen such as mycobacterial disease, malaria, leishmaniasis,
 CC toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a
 CC symptom of an immunoglobulin E (IgE)-related disorder, preferably an
 CC allergy-related disorder, in particular asthma in an individual. The
 CC present sequence represents an immunomodulatory oligonucleotide from the
 CC present invention
 CC
 XX SQ Sequence 11 BP; 2 A; 3 C; 3 G; 3 T; 0 U; 0 Other;
 Query Match 100.0%; Score 10; DB 6; Length 11;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 CGAACGTTTCG 10
 |||||
 Db 11 CGAACGTTTCG 2
 RESULT 21
 ADB88900
 ID ADB88900 standard; DNA; 11 BP.
 XX

AC ADB88900;
 XX 04-DEC-2003 (first entry)
 XX Chimeric immunomodulatory compound DNA sequence, SEQ ID No 103.
 DE
 XX chimeric immunomodulatory compound; CIC; immunomodulatory activity;
 KW spacer moiety; linear hexaethylene glycol structure; HEG; immune;
 KW Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma;
 KW IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating;
 KW immunoglobulin E; IgE; allergy; cancer;
 KW stimulating cellular immune system cell; ss.
 XX
 OS Synthetic.
 XX WO2003000922-A2.
 XX 03-JAN-2003.
 XX 21-JUN-2002; 2002WO-US020025.
 XX 21-JUN-2001; 2001US-0299883P.
 XX 23-APR-2002; 2002US-0375253P.
 XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 XX Fearon KL, Dina D, Tuck SF;
 XX WPI; 2003-210159/20.
 XX Novel chimeric immunomodulatory compound having immunomodulatory
 PT activity, useful for modulating an immune response and for treating
 PT cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.
 XX
 PS Disclosure; Page 36; 224pp; English.
 XX The invention relates to a novel chimeric immunomodulatory compound (CIC)
 CC having immunomodulatory activity, comprising two or more nucleic acid
 CC moieties and one or more non-nucleic acid spacer moieties, where at least
 CC one non-nucleic acid spacer moiety is covalently joined to two nucleic
 CC acid moieties, where the spacer is not a polypeptide, and at least one
 CC nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric
 CC immunomodulatory compounds more specifically contain the nucleic acid
 CC spacer moieties of linear hexaethylene glycol structure (HEG) subunits.
 CC CIC's are useful for modulating an immune response in an individual,
 CC where the individual suffers from a disorder associated with a Th2-type
 CC immune response which is an allergy or allergy-induced asthma, and an
 CC infectious disease. CIC is also useful for increasing IFN-gamma, or IFN-
 CC alpha; in an individual, where the individual has idiopathic pulmonary
 CC fibrosis, or a viral infection. CIC's are useful for ameliorating a
 CC symptom of an infectious disease, or an immunoglobulin E (IgE)-related
 CC disorder in an individual, where the IgE-related disorder is allergy, or
 CC an allergy-related disorder. CIC's are also useful for treating cancer
 CC and can be used for stimulating cellular immune system cells production
 CC in an individual. This polynucleotide sequence represents a DNA sequence
 CC which is a nucleic acid moiety part of a chimeric immunomodulatory compound
 CC of the invention.
 XX SQ Sequence 11 BP; 2 A; 3 C; 3 G; 3 T; 0 U; 0 Other;
 Query Match 100.0%; Score 10; DB 9; Length 11;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 CGAACGTTTCG 10
 |||||
 DB 2 CGAACGTTTCG 11
 RESULT 22
 ADB88900/c
 ID ADB88900 standard; DNA; 11 BP.
 XX

AC ADB88900;
 XX 04-DEC-2003 (first entry)
 XX Chimeric immunomodulatory compound DNA sequence, SEQ ID No 103.
 DE
 XX chimeric immunomodulatory compound; CIC; immunomodulatory activity;
 KW spacer moiety; linear hexaethylene glycol structure; HEG; immune;
 KW Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma;
 KW IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating;
 KW immunoglobulin E; IgE; allergy; cancer;
 KW stimulating cellular immune system cell; ss.
 XX
 OS Synthetic.
 XX WO2003000922-A2.
 XX 03-JAN-2003.
 XX 21-JUN-2002; 2002WO-US020025.
 XX 21-JUN-2001; 2001US-0299883P.
 XX 23-APR-2002; 2002US-0375253P.
 XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 XX Fearon KL, Dina D, Tuck SF;
 XX WPI; 2003-210159/20.
 XX Novel chimeric immunomodulatory compound having immunomodulatory
 PT activity, useful for modulating an immune response and for treating
 PT cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.
 XX
 PS Disclosure; Page 36; 224pp; English.
 XX The invention relates to a novel chimeric immunomodulatory compound (CIC)
 CC having immunomodulatory activity, comprising two or more nucleic acid
 CC moieties and one or more non-nucleic acid spacer moieties, where at least
 CC one non-nucleic acid spacer moiety is covalently joined to two nucleic
 CC acid moieties, where the spacer is not a polypeptide, and at least one
 CC nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric
 CC immunomodulatory compounds more specifically contain the nucleic acid
 CC spacer moieties of linear hexaethylene glycol structure (HEG) subunits.
 CC CIC's are useful for modulating an immune response in an individual,
 CC where the individual suffers from a disorder associated with a Th2-type
 CC immune response which is an allergy or allergy-induced asthma, and an
 CC infectious disease. CIC is also useful for increasing IFN-gamma, or IFN-
 CC alpha; in an individual, where the individual has idiopathic pulmonary
 CC fibrosis, or a viral infection. CIC's are useful for ameliorating a
 CC symptom of an infectious disease, or an immunoglobulin E (IgE)-related
 CC disorder in an individual, where the IgE-related disorder is allergy, or
 CC an allergy-related disorder. CIC's are also useful for treating cancer
 CC and can be used for stimulating cellular immune system cells production
 CC in an individual. This polynucleotide sequence represents a DNA sequence
 CC which is a nucleic acid moiety part of a chimeric immunomodulatory compound
 CC of the invention.
 XX SQ Sequence 11 BP; 2 A; 3 C; 3 G; 3 T; 0 U; 0 Other;
 Query Match 100.0%; Score 10; DB 9; Length 11;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 CGAACGTTTCG 10
 |||||
 DB 11 CGAACGTTTCG 2
 RESULT 23
 ADQ95385
 ID ADQ95385 standard; DNA; 11 BP.
 XX

CC ameliorating an Ige-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as schistosomiasis; diseases
 CC toxoplasmosis; parasitic diseases such as malaria; leishmaniasis,
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.

XX
 SQ Sequence 11 BP; 2 A; 3 C; 3 G; 3 T; 0 U; 0 Other;
 Query Match 100.0%; Score 10; DB 12; Length 11;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 |||||
 Db 11 CGAACGTTTCG 2

RESULT 25
 ADQ95388 standard; DNA; 11 BP.
 AC ADQ95388;
 DT 07-OCT-2004 (first entry)
 DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 130.
 KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotrophic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Anticancer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.
 OS Synthetic.

Key Location/Qualifiers
 modified_base 2 /*tag= a
 /mod_base= OTHER
 modified_base 6 /note= "C= 5-bromocytosine"
 /*tag= b
 /mod_base= OTHER

W02004058159-A2.
 15-JUN-2004.
 17-DEC-2003; 2003WO-US040417.
 23-DEC-2002; 2002US-0436406P.
 (DYNA-) DYNVAX TECHNOLOGIES CORP.
 Fearon KL;
 WPI; 2004-561515/54.
 New branched immunomodulatory compound comprising at least three nucleic
 acid moieties and at least one branch-point nucleoside, useful for
 modulating an immune response in individual suffering e.g. allergy.

XX Disclosure; SEQ ID NO 130; 183pp; English.
 XX
 CC The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an Ige-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammat
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.

XX
 SQ Sequence 11 BP; 2 A; 3 C; 3 G; 3 T; 0 U; 0 Other;
 Query Match 100.0%; Score 10; DB 12; Length 11;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 |||||
 Db 2 CGAACGTTTCG 11

RESULT 26
 ADQ95388/c
 ID ADQ95388 standard; DNA; 11 BP.
 AC ADQ95388;
 DT 07-OCT-2004 (first entry)
 DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 130.
 KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotrophic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Anticancer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.
 OS Synthetic.

Key Location/Qualifiers
 modified_base 2 /*tag= a
 /mod_base= OTHER
 modified_base 6 /note= "C= 5-bromocytosine"
 /*tag= b
 /mod_base= OTHER

FT XX /note= "c= 5-bromocytosine"

PN W02004058159-A2.

XX W02004058159-A2.

PD 15-JUL-2004.

XX 17-DEC-2003; 2003WO-US040417.

XX 23-DEC-2002; 2002US-0436406P.

PR (DYNA-) DYNAVAX TECHNOLOGIES CORP.

PA Fearon KL;

PI WPI; 2004-561515/54.

DR New branched immunomodulatory compound comprising at least three nucleic acid moieties and at least one branch-point nucleoside useful for modulating an immune response in individual suffering e.g. allergy.

XX Disclosure; SEQ ID NO 130; 183pp; English.

XX The present invention relates to novel branched immunomodulatory compounds (BIC) comprising at least three nucleic acid moieties, at least one of which comprises the nucleotide sequence 5'-CG-3', and at least one branch-point nucleoside. The BIC compounds has immunomodulatory activity e.g. the ability to stimulate interferon (IFN)-gamma production from human peripheral blood mononuclear cells, the ability to stimulate IFN-alpha production from human peripheral blood mononuclear cells and the ability to stimulate B cell proliferation. The BIC compounds are useful for modulating an immune response in an individual suffering from a disorder associated with a T helper (Th)2-type immune response e.g. allergy, allergy-induced asthma or an infectious disease; for increasing secretion of IFN-gamma by blood cells in an individual. The BIC compounds are also useful for immunomodulation of cells and individuals; in the fields of biomedicine and immunology; for the manufacture of a medicament ; for treating idiopathic pulmonary fibrosis, viral infection (e.g. hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for ameliorating an Igs-related disorder in an individual. The disorders includes atopic dermatitis, eosinophilic gastrointestinal inflammation, eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis; cancer; infectious disease resistant to humoral immune responses (e.g. diseases caused by mycobacterial infections and intracellular pathogens, cellular pathogens e.g. bacteria or protozoans or by subcellular pathogens e.g. viruses); mycobacterial diseases such as tuberculosis, leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases caused by intracellular parasites such as malaria; leishmaniasis, toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-induced fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in the BIC compounds of the invention.

XX Sequence 11 BP; 2 A; 3 C; 3 G; 3 T; 0 U; 0 Other;

SQ Query Match 100.0%; Score 10; DB 12; Length 11;
Best Local Similarity 100.0%; Pred. No. 4.7e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
|||||

Db 11 CGAACGTTTCG 2

RESULT 27

ADQ95361

ID ADQ95361 standard; DNA; 11 BP.

XX ADQ95361;

AC ADQ95361;

XX 07-OCT-2004 (first entry)

XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 103.

XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory; Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory; Dermatological; Immunosuppressive; Cytostatic; Protozoacide; Tuberculosis; Antileprotic; Antiparasitic; Antimalarial; Antiulcer; Gastrointestinal; Nephrotropic; Branched immunomodulatory compound; Immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha; IFN-alpha; ss.

XX Synthetic.

XX W02004058159-A2.

XX 15-JUL-2004.

XX 17-DEC-2003; 2003WO-US040417.

XX 23-DEC-2002; 2002US-0436406P.

XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX Fearon KL;

XX WPI; 2004-561515/54.

XX New branched immunomodulatory compound comprising at least three nucleic acid moieties and at least one branch-point nucleoside useful for modulating an immune response in individual suffering e.g. allergy.

XX Disclosure; SEQ ID NO 103; 183pp; English.

XX The present invention relates to novel branched immunomodulatory compounds (BIC) comprising at least three nucleic acid moieties, at least one of which comprises the nucleotide sequence 5'-CG-3', and at least one branch-point nucleoside. The BIC compounds has immunomodulatory activity e.g. the ability to stimulate interferon (IFN)-gamma production from human peripheral blood mononuclear cells, the ability to stimulate IFN-alpha production from human peripheral blood mononuclear cells and the ability to stimulate B cell proliferation. The BIC compounds are useful for modulating an immune response in an individual suffering from a disorder associated with a T helper (Th)2-type immune response e.g. allergy, allergy-induced asthma or an infectious disease; for increasing secretion of IFN-gamma by blood cells in an individual. The BIC compounds are also useful for immunomodulation of cells and individuals; in the fields of biomedicine and immunology; for the manufacture of a medicament ; for treating idiopathic pulmonary fibrosis, viral infection (e.g. hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for ameliorating an Igs-related disorder in an individual. The disorders includes atopic dermatitis, eosinophilic gastrointestinal inflammation, eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis; cancer; infectious disease resistant to humoral immune responses (e.g. diseases caused by mycobacterial infections and intracellular pathogens, cellular pathogens e.g. bacteria or protozoans or by subcellular pathogens e.g. viruses); mycobacterial diseases such as tuberculosis, leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases caused by intracellular parasites such as malaria; leishmaniasis, toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-induced fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in the BIC compounds of the invention.

XX Sequence 11 BP; 2 A; 3 C; 3 G; 3 T; 0 U; 0 Other;

SQ Query Match 100.0%; Score 10; DB 12; Length 11;
Best Local Similarity 100.0%; Pred. No. 4.7e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
|||||

Db 2 CGAACGTTTCG 11

RESULT 28
ADQ95361/c
ID ADQ95361 standard; DNA; 11 BP.
XX
AC ADQ95361;
XX
DT 07-OCT-2004 (first entry)
XX
DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 103.
XX
KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Anticancer;
KW Gastrointestinal; Nephrotropic; Branched immunomodulatory compound;
KW Immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
KW IFN-alpha; ss.
XX
OS Synthetic.
XX
PN WO2004058159-A2.
XX
PD 15-JUL-2004.
XX
PF 17-DEC-2003; 2003WO-US040417.
XX
PR 23-DEC-2002; 2002US-0436406P.
XX
PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.
XX
PI Fearon KL;
XX
DR WPI; 2004-561515/54.
XX
PT New branched immunomodulatory compound comprising at least three nucleic
PT acid moieties and at least one branch-point nucleoside, useful for
PT modulating an immune response in individual suffering e.g. allergy.
XX
PS Disclosure; SEQ ID NO 103; 183pp; English.
XX
CC The present invention relates to novel branched immunomodulatory
CC compounds (BIC) comprising at least three nucleic acid moieties, at least
CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
CC e.g. the ability to stimulate interferon (IFN)-gamma production from
CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
CC alpha production from human peripheral blood mononuclear cells and the
CC ability to stimulate B cell proliferation. The BIC compounds are useful
CC for modulating an immune response in an individual suffering from a
CC disorder associated with a T helper (Th)2-type immune response e.g.
CC allergy, allergy-induced asthma or an infectious disease; for increasing
CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
CC are also useful for immunomodulation of cells and individuals; in the
CC fields of biomedicine and immunology; for the manufacture of a medicament
CC for treating idiopathic pulmonary fibrosis, viral infection (e.g.
CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
CC ameliorating an IGE-related disorder in an individual. The disorders
CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
CC caused by intracellular parasites such as malaria; leishmaniasis,
CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
CC the BIC compounds of the invention.

Sequence 11 BP; 2 A; 3 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 12; Length 11;
Best Local Similarity 100.0%; Pred. No. 4.7e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
Db 11 CGAACGTTTCG 2
RESULT 29
ADQ95376
ID ADQ95376 standard; DNA; 11 BP.
XX
AC ADQ95376;
XX
DT 07-OCT-2004 (first entry)
XX
DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 118.
XX
KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Anticancer;
KW Gastrointestinal; Nephrotropic; Branched immunomodulatory compound;
KW Immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
KW IFN-alpha; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 2 /*tag= a
FT /mod_base= OTHER
FT /note= "c= 5-bromocytosine"
XX
PN WO2004058159-A2.
XX
PD 15-JUL-2004.
XX
PF 17-DEC-2003; 2003WO-US040417.
XX
PR 23-DEC-2002; 2002US-0436406P.
XX
PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.
XX
PI Fearon KL;
XX
DR WPI; 2004-561515/54.
XX
PT New branched immunomodulatory compound comprising at least three nucleic
PT acid moieties and at least one branch-point nucleoside, useful for
PT modulating an immune response in individual suffering e.g. allergy.
XX
PS Disclosure; SEQ ID NO 118; 183pp; English.
XX
CC The present invention relates to novel branched immunomodulatory
CC compounds (BIC) comprising at least three nucleic acid moieties, at least
CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
CC e.g. the ability to stimulate interferon (IFN)-gamma production from
CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
CC alpha production from human peripheral blood mononuclear cells and the
CC ability to stimulate B cell proliferation. The BIC compounds are useful
CC for modulating an immune response in an individual suffering from a
CC disorder associated with a T helper (Th)2-type immune response e.g.
CC allergy, allergy-induced asthma or an infectious disease; for increasing
CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
CC are also useful for immunomodulation of cells and individuals; in the
CC fields of biomedicine and immunology; for the manufacture of a medicament
CC for treating idiopathic pulmonary fibrosis, viral infection (e.g.
CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
CC ameliorating an IGE-related disorder in an individual. The disorders
CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,

CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.

XX
 SQ Sequence 11 BP; 2 A; 3 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 12; Length 11;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

Db 2 CGAACGTTTCG 11

RESULT 30

ADQ95376/c
 ID ADQ95376 standard; DNA; 11 BP.

XX
 AC ADQ95376;

XX
 DT 07-OCT-2004 (first entry)

XX
 DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 118.

XX
 KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotrophic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; Branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.

XX
 OS Synthetic.

XX
 FH Key Location/Qualifiers

FT modified_base 2 /*tag= a
 FT /mod_base= OTHER
 FT /note= "c= 5-bromocytosine"

XX
 PN WO2004058159-A2.

XX
 XX 15-JUL-2004.

XX
 PF 17-DEC-2003; 2003WO-US040417.

XX
 PR 23-DEC-2002; 2002US-0436406P.

XX
 PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX
 PI Fearon KL;

XX
 XX WPT; 2004-561515/54.

XX
 DR New branched immunomodulatory compound comprising at least three nucleic
 XX acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.

XX
 PS Disclosure; SEQ ID NO 118; 183pp; English.

XX
 XX The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one

CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IGE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.

XX
 SQ Sequence 11 BP; 2 A; 3 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 12; Length 11;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

Db 11 CGAACGTTTCG 2

RESULT 31

ADQ95387
 ID ADQ95387 standard; DNA; 11 BP.

XX
 AC ADQ95387;

XX
 DT 07-OCT-2004 (first entry)

XX
 DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 129.

XX
 KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotrophic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; Branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.

XX
 OS Synthetic.

XX
 FH Key Location/Qualifiers

FT modified_base 2 /*tag= a
 FT /mod_base= OTHER
 FT /note= "c= 5-bromocytosine"

XX
 FT modified_base 6

FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "c= 5-bromocytosine"

XX
 PN WO2004058159-A2.

XX
 XX 15-JUL-2004.

PF 17-DEC-2003; 2003WO-US040417.
 XX 23-DEC-2002; 2002US-0436406P.
 XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 XX Fearon KL;
 XX WPI; 2004-561515/54.
 XX New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.
 XX
 PS Disclosure; SEQ ID NO 129; 183pp; English.
 XX
 CC The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th) 2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an Igs-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 SQ Sequence 11 BP; 2 A; 3 C; 3 G; 2 T; 1 U; 0 Other;
 Query Match 100.0%; Score 10; DB 12; Length 11;
 Best Local Similarity 90.0%; Pred. No. 4.7e+03;
 Matches 9; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 CGAAGCTTCG 10
 Db 2 CGAAGCTTCG 11
 RESULT 32
 ADQ95387/c
 ID ADQ95387 standard; DNA; 11 BP.
 XX
 AC ADQ95387;
 XX
 DT 07-OCT-2004 (first entry)
 XX
 DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 129.
 XX
 KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;

KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.
 OS Synthetic.
 FH Key Location/Qualifiers
 FT modified_base 2 /*tag= a
 FT /mod_base= OTHER
 FT /note= "c= 5-bromocytosine"
 FT modified_base 6 /*tag= b
 FT /mod_base= OTHER
 FT /note= "c= 5-bromocytosine"
 XX WO2004058159-A2.
 XX 15-JUL-2004.
 XX 17-DEC-2003; 2003WO-US040417.
 XX 23-DEC-2002; 2002US-0436406P.
 XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 XX Fearon KL;
 XX WPI; 2004-561515/54.
 XX New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.
 XX
 PS Disclosure; SEQ ID NO 129; 183pp; English.
 XX
 CC The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th) 2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an Igs-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 SQ Sequence 11 BP; 2 A; 3 C; 3 G; 2 T; 1 U; 0 Other;
 Query Match 100.0%; Score 10; DB 12; Length 11;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 CGAAGCTTCG 10

Db 11 CGAACGTTTCG 2
 RESULT 33
 ADQ16825
 ID ADQ16825 standard; DNA; 11 BP.
 XX
 AC ADQ16825;
 XX
 DT 07-OCT-2004 (first entry)
 XX
 DE Immunomodulatory polynucleotide, SEQ ID NO 104.
 XX
 KW Immunomodulatory polynucleotide; IMP; palindromic sequence; dinucleotide;
 KW trinucleotide; antimicrobial; antiallergic; antiasthmatic;
 KW dermatological; antiinflammatory; ophthalmological; immunosuppressive;
 KW antibacterial; vasotrophic; antiparasitic; virucide; hepatotropic;
 KW anti-HIV; cytostatic; antiulcer; nephrotropic; IGE-related disorder;
 KW T helper; (TH)2-type immune response; vaccine; prophylactic; immune;
 KW interferon-gamma; interferon-alpha; type I interferon; IFN-alpha;
 KW IFN-omega; IFN-gamma; plasmacytoid dendritic cell; ss.
 XX
 OS Unidentified.
 XX
 PN WO2004058179-A2.
 XX
 PD 15-JUL-2004.
 XX
 PF 18-DEC-2003; 2003WO-US041001.
 XX
 PR 23-DEC-2002; 2002US-0436122P.
 PR 13-FEB-2003; 2003US-0447885P.
 PR 01-MAY-2003; 2003US-0467546P.
 XX
 PA (DYNA-) DYNAVAX TECHNOLOGIES.
 XX
 PI Dina D, Fearon KL, Marshall J;
 XX
 DR WPI; 2004-525782/50.
 XX
 XX Immunomodulatory polynucleotide useful for the treatment of e.g. atopic
 PT dermatitis comprises palindromic sequence comprising at least eight bases
 PT in length, which contains at least two dinucleotides and at least one
 PT trinucleotide.
 XX
 PS Example 1; SEQ ID NO 104; 119pp; English.
 XX
 CC The invention relates to a novel immunomodulatory polynucleotide (IMP)
 CC comprising a palindromic sequence. The palindromic sequence comprises at
 CC least 8 bases in length, which contains at least two dinucleotides (CG),
 CC and at least one trinucleotide (TCG) at or near the 5' end of the
 CC polynucleotide. The CG dinucleotides are separated by 0 - 5 bases. The 5'
 CC T of the (TCG) is positioned 0 - 3 bases from the 5' end of the
 CC polynucleotide. The (TCG) is separated from the 5' end of the
 CC palindromic sequence by 0 - 2 bases. The palindromic sequence includes
 CC all or part of the (TCG) sequence, where y=1 or 2. The immunomodulatory
 CC polynucleotides have the following activities: antimicrobial,
 CC antiallergic, antiasthmatic, dermatological, antiinflammatory,
 CC ophthalmological, immunosuppressive, antibacterial, vasotrophic,
 CC antiparasitic, virucide, hepatotropic, anti-HIV, cytostatic, antiulcer,
 CC and nephrotropic. The immunomodulatory polynucleotides can be used for
 CC ameliorating a symptom of an infectious disease and IGE-related disorder.
 CC The IMP's may also be used for the treatment of a disorder associated
 CC with a T helper (TH)2-type immune response (e.g. allergies, allergy-
 CC induced asthma or atopic dermatitis), individuals receiving vaccines such
 CC as therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a
 CC mycobacterial epitope or a tumour associated epitope) or prophylactic
 CC vaccines. The IMP's can also be used for the treatment of e.g. food
 CC allergies, rhinitis, atopic dermatitis, conjunctivitis, urticaria, shock,
 CC Hymenoptera sting allergies and drug allergies and parasitic infections;
 CC viral disease e.g. Hepatitis B, Hepatitis C, Influenza, Acquired
 CC immunodeficiency syndrome (AIDS) and Herpes zoster; and cancer;

CC inflammatory disorder e.g. ulcerative colitis; fibrotic disorder e.g.
 CC idiopathic pulmonary fibrosis, scleroderma, cutaneous radiation-induced
 CC fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic
 CC fibrosis, renal fibrosis. The IMP's may also be used to create a
 CC prophylactic vaccine to increase resistance to infection by bacterial or
 CC viral pathogens. The immunomodulatory polynucleotide modulates an immune
 CC response; or increases interferon-gamma; or interferon-alpha; effectively
 CC stimulates cytokines including type I interferons e.g. IFN-alpha and IFN-
 CC omega and IFN-gamma, production from human cells; effectively stimulates
 CC B cells to proliferate; and activates plasmacytoid dendritic cells to
 CC undergo maturation which can result in retardation of plasmacytoid
 CC dendritic cell apoptosis in culture. This polynucleotide sequence
 CC represents an immunomodulatory polynucleotide of the invention.
 XX
 SQ Sequence 11 BP; 2 A; 3 C; 3 G; 3 T; 0 U; 0 Other;
 Query Match 100.0%; Score 10; DB 13; Length 11;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 CGAACGTTTCG 10
 DB 2 CGAACGTTTCG 11
 RESULT 34
 ADQ16825/c
 ID ADQ16825 standard; DNA; 11 BP.
 XX
 AC ADQ16825;
 XX
 DT 07-OCT-2004 (first entry)
 XX
 DE Immunomodulatory polynucleotide, SEQ ID NO 104.
 XX
 KW Immunomodulatory polynucleotide; IMP; palindromic sequence; dinucleotide;
 KW trinucleotide; antimicrobial; antiallergic; antiasthmatic;
 KW dermatological; antiinflammatory; ophthalmological; immunosuppressive;
 KW antibacterial; vasotrophic; antiparasitic; virucide; hepatotropic;
 KW anti-HIV; cytostatic; antiulcer; nephrotropic; IGE-related disorder;
 KW T helper; (TH)2-type immune response; vaccine; prophylactic; immune;
 KW interferon-gamma; interferon-alpha; type I interferon; IFN-alpha;
 KW IFN-omega; IFN-gamma; plasmacytoid dendritic cell; ss.
 XX
 OS Unidentified.
 XX
 PN WO2004058179-A2.
 XX
 PD 15-JUL-2004.
 XX
 PF 18-DEC-2003; 2003WO-US041001.
 XX
 PR 23-DEC-2002; 2002US-0436122P.
 PR 13-FEB-2003; 2003US-0447885P.
 PR 01-MAY-2003; 2003US-0467546P.
 XX
 PA (DYNA-) DYNAVAX TECHNOLOGIES.
 XX
 PI Dina D, Fearon KL, Marshall J;
 XX
 DR WPI; 2004-525782/50.
 XX
 XX Immunomodulatory polynucleotide useful for the treatment of e.g. atopic
 PT dermatitis comprises palindromic sequence comprising at least eight bases
 PT in length, which contains at least two dinucleotides and at least one
 PT trinucleotide.
 XX
 PS Example 1; SEQ ID NO 104; 119pp; English.
 XX
 CC The invention relates to a novel immunomodulatory polynucleotide (IMP)
 CC comprising a palindromic sequence. The palindromic sequence comprises at
 CC least 8 bases in length, which contains at least two dinucleotides (CG),
 CC and at least one trinucleotide (TCG) at or near the 5' end of the
 CC polynucleotide. The CG dinucleotides are separated by 0 - 5 bases. The 5'
 CC T of the (TCG) is positioned 0 - 3 bases from the 5' end of the
 CC polynucleotide. The (TCG) is separated from the 5' end of the
 CC palindromic sequence by 0 - 2 bases. The palindromic sequence includes
 CC all or part of the (TCG) sequence, where y=1 or 2. The immunomodulatory
 CC polynucleotides have the following activities: antimicrobial,
 CC antiallergic, antiasthmatic, dermatological, antiinflammatory,
 CC ophthalmological, immunosuppressive, antibacterial, vasotrophic,
 CC antiparasitic, virucide, hepatotropic, anti-HIV, cytostatic, antiulcer,
 CC and nephrotropic. The immunomodulatory polynucleotides can be used for
 CC ameliorating a symptom of an infectious disease and IGE-related disorder.
 CC The IMP's may also be used for the treatment of a disorder associated
 CC with a T helper (TH)2-type immune response (e.g. allergies, allergy-
 CC induced asthma or atopic dermatitis), individuals receiving vaccines such
 CC as therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a
 CC mycobacterial epitope or a tumour associated epitope) or prophylactic
 CC vaccines. The IMP's can also be used for the treatment of e.g. food
 CC allergies, rhinitis, atopic dermatitis, conjunctivitis, urticaria, shock,
 CC Hymenoptera sting allergies and drug allergies and parasitic infections;
 CC viral disease e.g. Hepatitis B, Hepatitis C, Influenza, Acquired
 CC immunodeficiency syndrome (AIDS) and Herpes zoster; and cancer;

polynucleotide. The CG dinucleotides are separated by 0 - 5 bases. The 5' T of the (TCG)Y is positioned 0 - 3 bases from the 5' end of the polynucleotide. The (TCG)Y is separated from the 5' end of the palindromic sequence by 0 - 2 bases. The palindromic sequence includes all or part of the (TCG)Y sequence, where Y=1 or 2. The immunomodulatory polynucleotides have the following activities: antimicrobial, antiallergic, antiasthmatic, dermatological, antiinflammatory, ophthalmological, immunosuppressive, antibacterial, vasotropic, antiparasitic, virucide, hepatotropic, anti-HIV, cytostatic, antiulcer, and nephrotropic. The immunomodulatory polynucleotides can be used for ameliorating a symptom of an infectious disease and IgE-related disorder. The IMP's may also be used for the treatment of a disorder associated with a T helper (TH)2-type immune response (e.g. allergies, allergy-induced asthma or atopic dermatitis), individuals receiving vaccines such as therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a mycobacterial epitope or a tumour associated epitope) or prophylactic vaccines. The IMP's can also be used for the treatment of e.g. food allergies, rhinitis, atopic dermatitis, conjunctivitis, urticaria, shock, Hymenoptera sting allergies and drug allergies and parasitic infections; viral disease e.g. Hepatitis B, Hepatitis C, Influenza, Acquired immunodeficiency syndrome (AIDS) and Herpes zoster; and cancer; inflammatory disorder e.g. ulcerative colitis; fibrotic disorder e.g. idiopathic pulmonary fibrosis, scleroderma, cutaneous radiation-induced fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic fibrosis, renal fibrosis. The IMP's may also be used to create a prophylactic vaccine to increase resistance to infection by bacterial or viral pathogens. The immunomodulatory polynucleotide modulates an immune response; or increases interferon-gamma; or interferon-alpha; effectively stimulates cytokines including type I interferons e.g. IFN-alpha and IFN-omega and IFN-gamma, production from human cells; effectively stimulates B cells to proliferate; and activates plasmacytoid dendritic cells to undergo maturation which can result in retardation of plasmacytoid dendritic cell apoptosis in culture. This polynucleotide sequence represents an immunomodulatory polynucleotide of the invention.

XX Sequence 11 BP; 2 A; 3 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 13; Length 11;
Best Local Similarity 100.0%; Pred. No. 4.7e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 11 CGAACGTTTCG 2

RESULT 35
ADQ95393

ID ADQ95393 standard; DNA; 12 BP.

XX AC ADQ95393;

XX DT 07-OCT-2004 (first entry)

XX DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 135.

XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
XX Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
XX Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
XX Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
XX Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
XX immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
XX IFN-alpha; ss.

OS Synthetic.

XX Key Location/Qualifiers
FT modified_base 12

FT /*tag= a
FT /mod_base= OTHER

FT /note= "A-3" is attached to the 5' position of a branch
FT point adenosine, rA, which is further attached to two
FT oligonucleotides, SEQ ID 136 at the 3' position of rA,

FT and SEQ ID 137 at the 2' position of rA"

XX PN W02004058159-A2.

XX PD 15-JUN-2004.

XX PF 17-DEC-2003; 2003WO-US040417.

XX PR 23-DEC-2002; 2002US-0436406P.

XX PA (DYNA-) DYNAXV TECHNOLOGIES CORP.

XX PI Fearon KL;

XX DR WPI; 2004-561515/54.

XX New branched immunomodulatory compound comprising at least three nucleic acid moieties and at least one branch-point nucleoside, useful for modulating an immune response in individual suffering e.g. allergy.

XX Example 5; SEQ ID NO 135; 183pp; English.

XX The present invention relates to novel branched immunomodulatory compounds (BIC) comprising at least three nucleic acid moieties, at least one of which comprises the nucleotide sequence 5'-CG-3', and at least one branch-point nucleoside. The BIC compounds have immunomodulatory activity e.g. the ability to stimulate interferon (IFN)-gamma production from human peripheral blood mononuclear cells, the ability to stimulate IFN-alpha production from human peripheral blood mononuclear cells and the ability to stimulate B cell proliferation. The BIC compounds are useful for modulating an immune response in an individual suffering from a disorder associated with a T helper (Th)2-type immune response e.g. allergy, allergy-induced asthma or an infectious disease; for increasing secretion of IFN-gamma by blood cells in an individual. The BIC compounds are also useful for immunomodulation of cells and individuals; in the fields of biomedicine and immunology; for the manufacture of a medicament ; for treating idiopathic pulmonary fibrosis, viral infection (e.g. hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for ameliorating an IGE-related disorder in an individual. The disorders includes atopic dermatitis, eosinophilic gastrointestinal inflammation, eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis; cancer; infectious disease resistant to humoral immune responses (e.g. cellular pathogens e.g. bacteria or protozoans or by subcellular pathogens e.g. viruses); mycobacterial infections; herpes viruses; diseases caused by intracellular parasites such as malaria; leishmaniasis, toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-induced fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in the BIC compounds of the invention.

SQ Sequence 12 BP; 3 A; 3 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 12; Length 12;

Best Local Similarity 100.0%; Pred. No. 4.7e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

Db 2 CGAACGTTTCG 11

RESULT 36

ADQ95393/c

ID ADQ95393 standard; DNA; 12 BP.

XX AC ADQ95393;

XX DT 07-OCT-2004 (first entry)

XX DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 135.

CC vaccines. The IMP's can also be used for the treatment of e.g. food
 CC allergies, rhinitis, atopic dermatitis, conjunctivitis, urticaria, shock,
 CC Hymenoptera sting allergies and drug allergies and parasitic infections;
 CC viral disease e.g. Hepatitis B, Hepatitis C, influenza, Acquired
 CC immunodeficiency syndrome (AIDS) and Herpes zoster; and cancer;
 CC inflammatory disorder e.g. ulcerative colitis; fibrotic disorder e.g.
 CC idiopathic pulmonary fibrosis, scleroderma, cutaneous radiation-induced
 CC fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic
 CC fibrolytic vaccine to increase resistance to infection by bacterial or
 CC viral pathogens. The IMP's may also be used to create a
 CC stimulates cytokines including type I interferons e.g. IFN-alpha and IFN-
 CC omega and IFN-gamma, production from human cells; effectively stimulates
 CC B cells to proliferate; and activates plasmacytoid dendritic cells to
 CC undergo maturation which can result in retardation of plasmacytoid
 CC dendritic cell apoptosis in culture. This polynucleotide sequence
 CC represents an immunomodulatory polynucleotide of the invention.

XX Sequence 12 BP; 3 A; 3 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 13; Length 12;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

Db 2 CGAACGTTTCG 11

RESULT 38

ADQ16824/C
 ID ADQ16824 standard; DNA; 12 BP.

XX ADQ16824;

XX 07-OCT-2004 (first entry)

XX Immunomodulatory polynucleotide, SEQ ID NO 103.

XX Immunomodulatory polynucleotide; IMP; palindromic sequence; dinucleotide;
 KW trinucleotide; antimicrobial; antiallergic; antiasthmatic;
 KW dermatological; antiinflammatory; ophthalmological; immunosuppressive;
 KW antibacterial; vasotrophic; antiparasitic; virucide; hepatotropic;
 KW anti-HIV; cytostatic; antitumor; nephrotropic; IGE-related disorder;
 KW T helper; (TH)2-type immune response; vaccine; prophylactic; immune;
 KW interferon-gamma; interferon-alpha; type I interferon; IFN-alpha;
 KW IFN-omega; IFN-gamma; plasmacytoid dendritic cell; ss.

XX Unidentified.

XX WO2004058179-A2.

XX 15-JUL-2004.

XX 18-DEC-2003; 2003WO-US041001.

XX 23-DEC-2002; 2002US-0436122P.

XX 13-FEB-2003; 2003US-0447885P.

XX 01-MAY-2003; 2003US-0467546P.

XX (DYNA-) DYNAVAX TECHNOLOGIES.

XX Dina D, Fearon KL, Marshall J;

XX WPI; 2004-525782/50.

XX Immunomodulatory polynucleotide useful for the treatment of e.g. atopic
 PT dermatitis comprises palindromic sequence comprising at least eight bases
 PT in length, which contains at least two dinucleotides and at least one
 PT trinucleotide.

XX Example 1; SEQ ID NO 103; 119pp; English.

XX The invention relates to a novel immunomodulatory polynucleotide (IMP)
 CC comprising a palindromic sequence. The palindromic sequence comprises at
 CC least 8 bases in length, which contains at least two dinucleotides (CG),
 CC and at least one trinucleotide (TCG) at or near the 5' end of the
 CC polynucleotide. The CG dinucleotides are separated by 0 - 5 bases. The 5'
 CC T of the (TCG) is positioned 0 - 3 bases from the 5' end of the
 CC palindromic sequence by 0 - 2 bases. The palindromic sequence includes
 CC all or part of the (TCG) sequence, where y=1 or 2. The immunomodulatory
 CC polynucleotides have the following activities: antimicrobial,
 CC antiallergic, antiasthmatic, dermatological, antinflammatory,
 CC ophthalmological, immunosuppressive, antibacterial, vasotropic,
 CC antiparasitic, virucide, hepatotropic, anti-HIV, cytostatic, antitumor,
 CC and nephrotropic. The immunomodulatory polynucleotides can be used for
 CC ameliorating a symptom of an infectious disease and IGE-related disorder.
 CC The IMP's may also be used for the treatment of a disorder associated
 CC with a T helper (TH)2-type immune response (e.g. allergies, allergy-
 CC induced asthma or atopic dermatitis), individuals receiving vaccines such
 CC as therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a
 CC mycobacterial epitope or a tumour associated epitope) or prophylactic
 CC vaccines. The IMP's can also be used for the treatment of e.g. food
 CC allergies, rhinitis, atopic dermatitis, conjunctivitis, urticaria, shock,
 CC Hymenoptera sting allergies and drug allergies and parasitic infections;
 CC viral disease e.g. Hepatitis B, Hepatitis C, influenza, Acquired
 CC immunodeficiency syndrome (AIDS) and Herpes zoster; and cancer;
 CC inflammatory disorder e.g. ulcerative colitis; fibrotic disorder e.g.
 CC idiopathic pulmonary fibrosis, scleroderma, cutaneous radiation-induced
 CC fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic
 CC fibrosis, renal fibrosis. The IMP's may also be used to create a
 CC prophylactic vaccine to increase resistance to infection by bacterial or
 CC viral pathogens. The immunomodulatory polynucleotide modulates an immune
 CC response; or increases interferon-gamma; or interferon-alpha; effectively
 CC stimulates cytokines including type I interferons e.g. IFN-alpha and IFN-
 CC omega and IFN-gamma, production from human cells; effectively stimulates
 CC B cells to proliferate; and activates plasmacytoid dendritic cells to
 CC undergo maturation which can result in retardation of plasmacytoid
 CC dendritic cell apoptosis in culture. This polynucleotide sequence
 CC represents an immunomodulatory polynucleotide of the invention.

XX Sequence 12 BP; 3 A; 3 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 13; Length 12;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

Db 11 CGAACGTTTCG 2

RESULT 39

ABC16000

ID ABC16000 standard; DNA; 13 BP.

XX ABC16000;

XX 20-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 16007 for detecting SNP TSC0003513.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX SQ Sequence 13 BP; 4 A; 4 C; 3 G; 2 T; 0 U; 0 Other;
 Query Match 100.0%; Score 10; DB 5; Length 13;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 |||||
 Db 3 CGAACGTTTCG 12
 |||||

RESULT 42
 ABC16001/c
 ID ABC16001 standard; DNA; 13 BP.
 AC ABC16001;
 XX
 XX 20-FEB-2002 (first entry)
 DT
 XX
 DE Oligonucleotide SEQ ID NO 16008 for detecting SNP TSC0003513.
 XX
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 XX WO200177384-A2.
 PN
 XX 18-OCT-2001.
 PD
 XX
 PF 06-APR-2001; 2001WO-1B000713.
 XX
 XX 07-APR-2000; 2000DE-01019173.
 PR
 XX (EPIG-) EPIGENOMICS AG.
 PA
 XX Olek A, Piepenbrock C, Berlin K;
 PI
 XX WPI; 2001-657177/75.
 DR
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 XX Claim 1; SEQ ID NO 16008; 29pp + Sequence Listing; German.
 PS
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 XX Sequence 13 BP; 4 A; 4 C; 3 G; 2 T; 0 U; 0 Other;
 Query Match 100.0%; Score 10; DB 5; Length 13;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 |||||
 Db 12 CGAACGTTTCG 3
 |||||

RESULT 43

ABQ75224
 ID ABQ75224 standard; DNA; 13 BP.
 XX
 AC ABQ75224;
 XX
 DT 05-NOV-2002 (first entry)
 XX
 DE ISS immunomodulatory oligonucleotide SEQ ID NO:97.
 XX
 KW Immunostimulatory sequence; ISS: immunomodulatory; immune response;
 KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
 KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
 KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
 KW immunoglobulin E; IgE-related disorder; anti-allergic; antiasthmatic;
 KW virucide; antibacterial; protozoacide; ss.
 XX
 OS Synthetic.
 XX
 XX WO200252002-A2.
 PN
 XX 04-JUL-2002.
 PD
 XX 27-DEC-2001; 2001WO-US050821.
 PF
 XX 27-DEC-2000; 2000US-0258675P.
 PR
 XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 PA
 XX Fearon KL, Dina D;
 PI
 XX WPI; 2002-657426/70.
 DR
 XX Immunomodulatory polynucleotide for modulating an immune response in a
 PT subject suffering from disorders associated with Th2-type immune
 PT response, e.g. allergy, or infectious disease, comprises an
 PT immunostimulatory sequence.
 XX
 XX Disclosure; Page 23; 95pp; English.
 XX
 CC The present invention describes an immunomodulatory polynucleotide (I)
 CC comprising an immunostimulatory sequence (ISS). Also described: (1) an
 CC immunomodulatory composition comprising (1); (2) an immunomodulatory
 CC polynucleotide/microcarrier (IMP/MC) complex, comprising (1) linked to a
 CC biodegradable MC, where the MC is less than 10 micrometre in size; and
 CC (3) a kit comprising (1). (1) has anti-allergic, antiasthmatic, virucide,
 CC antibacterial and protozoacide activities, and can be used as a modulator
 CC of immune response. (1) is useful for modulating an immune response in an
 CC individual suffering from disorders associated with a Th2-type immune
 CC response, especially an allergy or asthma, or an infectious disease. (1)
 CC is also useful for increasing interferon-gamma (IFN-gamma) in an
 CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
 CC individual having a viral infection. (1) is further useful for
 CC ameliorating a symptom of an infectious disease caused by a cellular
 CC pathogen such as mycobacterial disease, malaria, leishmaniasis,
 CC toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a
 CC symptom of an immunoglobulin E (IgE)-related disorder, preferably an
 CC allergy-related disorder, in particular asthma in an individual. The
 CC present sequence represents an immunomodulatory oligonucleotide from the
 CC present invention
 XX
 XX Sequence 13 BP; 2 A; 4 C; 4 G; 3 T; 0 U; 0 Other;
 Query Match 100.0%; Score 10; DB 6; Length 13;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 |||||
 Db 4 CGAACGTTTCG 13
 |||||

RESULT 44
 ABQ75224/c

ID ABQ75224 standard; DNA; 13 BP.
XX
AC
XX ABQ75224;
XX
DT 05-NOV-2002 (first entry)
XX
DE ISS immunomodulatory oligonucleotide SEQ ID NO:97.
XX
XX Immunostimulatory sequence; ISS: immunomodulatory; immune response;
KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
KW immunoglobulin E; IgE-related disorder; antiallergic; antiasthmatic;
KW virucide; antibacterial; protozoacide; ss.
XX
OS Synthetic.
XX
XX WO200252002-A2.
XX
XX 04-JUL-2002.
XX
XX 27-DEC-2001; 2001WO-US050821.
XX
XX 27-DEC-2000; 2000US-0258675P.
XX
XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
XX
XX Fearon KL, Dina D;
XX WPI; 2002-657426/70.
XX
XX Immunomodulatory polynucleotide for modulating an immune response in a
PT subject suffering from disorders associated with Th2-type immune
PT response, e.g. allergy, or infectious disease, comprises an
PT immunostimulatory sequence.
XX
XX Disclosure; Page 23; 95pp; English.
XX
XX The present invention describes an immunomodulatory polynucleotide (I)
CC comprising an immunostimulatory sequence (ISS). Also described: (1) an
CC immunomodulatory composition comprising (I); (2) an immunomodulatory
CC polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a
CC biodegradable MC, where the MC is less than 10 micrometre in size; and
CC (3) a kit comprising (I). (I) has antiallergic, antiasthmatic, virucide,
CC antibacterial and protozoacide activities, and can be used as a modulator
CC of immune response. (I) is useful for modulating an immune response in an
CC individual suffering from disorders associated with a Th2-type immune
CC response, especially an allergy or asthma, or an infectious disease. (I)
CC is also useful for increasing interferon-gamma (IFN-gamma) in an
CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
CC individual having a viral infection. (I) is further useful for
CC ameliorating a symptom of an infectious disease caused by a cellular
CC pathogen such as mycobacterial disease, malaria, leishmaniasis,
CC toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a
CC symptom of an immunoglobulin E (IgE)-related disorder, preferably an
CC allergy-related disorder, in particular asthma in an individual. The
CC present sequence represents an immunomodulatory oligonucleotide from the
XX present invention
XX Sequence 13 BP; 2 A; 4 C; 4 G; 3 T; 0 U; 0 Other;
Query Match 100.0%; Score 10; DB 6; Length 13;
Best Local Similarity 100.0%; Pred. No. 4.7e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 CGAACGTTTCG 10
Db 13 CGAACGTTTCG 4
RESULT 45
ABQ75225
.ID ABQ75225 standard; DNA; 13 BP.

XX ABQ75225;
AC
XX
DT 05-NOV-2002 (first entry)
XX
DE ISS immunomodulatory oligonucleotide SEQ ID NO:99.
XX
XX Immunostimulatory sequence; ISS: immunomodulatory; immune response;
KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
KW immunoglobulin E; IgE-related disorder; antiallergic; antiasthmatic;
KW virucide; antibacterial; protozoacide; ss.
XX
OS Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 2 /*tag= a
FT /mod_base= OTHER
FT /note= "5-bromocytosine"
FT
XX WO200252002-A2.
XX
XX 04-JUL-2002.
XX
XX 27-DEC-2001; 2001WO-US050821.
XX
XX 27-DEC-2000; 2000US-0258675P.
XX
XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
XX
XX Fearon KL, Dina D;
XX WPI; 2002-657426/70.
XX
XX Immunomodulatory polynucleotide for modulating an immune response in a
PT subject suffering from disorders associated with Th2-type immune
PT response, e.g. allergy, or infectious disease, comprises an
PT immunostimulatory sequence.
XX
XX Disclosure; Page 23; 95pp; English.
XX
XX The present invention describes an immunomodulatory polynucleotide (I)
CC comprising an immunostimulatory sequence (ISS). Also described: (1) an
CC immunomodulatory composition comprising (I); (2) an immunomodulatory
CC polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a
CC biodegradable MC, where the MC is less than 10 micrometre in size; and
CC (3) a kit comprising (I). (I) has antiallergic, antiasthmatic, virucide,
CC antibacterial and protozoacide activities, and can be used as a modulator
CC of immune response. (I) is useful for modulating an immune response in an
CC individual suffering from disorders associated with a Th2-type immune
CC response, especially an allergy or asthma, or an infectious disease. (I)
CC is also useful for increasing interferon-gamma (IFN-gamma) in an
CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
CC individual having a viral infection. (I) is further useful for
CC ameliorating a symptom of an infectious disease caused by a cellular
CC pathogen such as mycobacterial disease, malaria, leishmaniasis,
CC toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a
CC symptom of an immunoglobulin E (IgE)-related disorder, preferably an
CC allergy-related disorder, in particular asthma in an individual. The
CC present sequence represents an immunomodulatory oligonucleotide from the
XX present invention
XX Sequence 13 BP; 2 A; 3 C; 4 G; 3 T; 0 U; 1 Other;
Query Match 100.0%; Score 10; DB 6; Length 13;
Best Local Similarity 100.0%; Pred. No. 4.7e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 CGAACGTTTCG 10
Db 4 CGAACGTTTCG 13

RESULT 46
 ABQ75225/c
 ID ABQ75225 standard; DNA; 13 BP.
 XX
 AC ABQ75225;
 XX
 DT 05-NOV-2002 (first entry)
 XX
 DE ISS immunomodulatory oligonucleotide SEQ ID NO:99.
 XX
 KW Immunostimulatory sequence; ISS: immunomodulatory; immune response;
 KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
 KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
 KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
 KW immunoglobulin E; IgE-related disorder; antiasthmatic;
 KW virucide; antibacterial; protozoacide; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 2 /*tag= a
 FT /mod_base= OTHER
 FT /note= "5-bromocytosine"
 FT
 XX WO200252002-A2.
 XX
 XX 04-JUL-2002.
 XX
 XX 27-DEC-2001; 2001WO-US050821.
 XX
 XX 27-DEC-2000; 2000US-0258675P.
 XX
 XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 XX
 XX Fearon KL, Dina D;
 XX WPI; 2002-657426/70.
 XX
 XX Immunomodulatory polynucleotide for modulating an immune response in a
 PT subject suffering from disorders associated with Th2-type immune
 PT response, e.g. allergy, or infectious disease, comprises an
 PT immunostimulatory sequence.
 XX
 XX Disclosure; Page 23; 95pp; English.
 XX
 CC The present invention describes an immunomodulatory polynucleotide (I)
 CC comprising an immunostimulatory sequence (ISS). Also described: (1) an
 CC immunomodulatory composition comprising (1); (2) an immunomodulatory
 CC polynucleotide/microcarrier (IMP/MC) complex, comprising (1) linked to a
 CC biodegradable MC, where the MC is less than 10 micrometre in size; and
 CC (3) a kit comprising (1). (1) has antiasthmatic, antiasthmatic, virucide,
 CC antibacterial and protozoacide activities, and can be used as a modulator
 CC of immune response. (1) is useful for modulating an immune response in an
 CC individual suffering from disorders associated with a Th2-type immune
 CC response, especially an allergy or asthma, or an infectious disease. (1)
 CC is also useful for increasing interferon-gamma (IFN-gamma) in an
 CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
 CC individual having a viral infection. (1) is further useful for
 CC ameliorating a symptom of an infectious disease caused by a cellular
 CC pathogen such as mycobacterial disease, malaria, leishmaniasis,
 CC toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a
 CC symptom of an immunoglobulin E (IgE)-related disorder, preferably an
 CC allergy-related disorder, in particular asthma in an individual. The
 CC present sequence represents an immunomodulatory oligonucleotide from the
 CC present invention
 XX
 SQ Sequence 13 BP; 2 A; 3 C; 4 G; 3 T; 0 U; 1 Other;
 Query Match 100.0%; Score 10; DB 6; Length 13;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 CGAACGTTTCG 10
 Db 13 CGAACGTTTCG 4
 RESULT 47
 ADQ95397
 ID ADQ95397 standard; DNA; 13 BP.
 XX
 AC ADQ95397;
 XX
 DT 07-OCT-2004 (first entry)
 XX
 DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 139.
 XX
 KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileptotic; Antiparasitic; Antimalarial; Antitumor;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.
 XX
 OS Synthetic.
 XX
 XX WO2004058159-A2.
 XX
 XX 15-JUL-2004.
 XX
 XX 17-DEC-2003; 2003WO-US040417.
 XX
 XX 23-DEC-2002; 2002US-0436406P.
 XX
 XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 XX
 XX Fearon KL;
 XX WPI; 2004-561515/54.
 XX
 XX New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.
 XX
 XX Example 5; SEQ ID NO 139; 183pp; English.
 XX
 CC The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th) 2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IgE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. marinum or Mycobacterium infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory

CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.

XX SQ Sequence 13 BP; 4 A; 3 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 12; Length 13;

Best Local Similarity 100.0%; Pred. No. 4.7e+03; Indels 0; Gaps 0;

Matches 10; Conservative 0; Mismatches 0;

QY 1 CGAACGTTTCG 10

1111111111

DB 2 CGAACGTTTCG 11

RESULT 48

ADQ95397/c

ID ADQ95397 standard; DNA; 13 BP.

AC ADQ95397;

XX 07-OCT-2004 (first entry)

XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 139.

XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Varicella; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculosis; Antileptotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.

XX Synthetic.

XX WO2004058159-A2.

XX 15-JUL-2004.

XX 17-DEC-2003; 2003WO-US040417.

XX 23-DEC-2002; 2002US-0436406P.

XX (DYNA-) DYNNAVX TECHNOLOGIES CORP.

XX Fearon KL;

XX WPI; 2004-561515/54.

XX New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.

XX Example 5; SEQ ID NO 139; 183pp; English.

XX The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IgE-related disorder in an individual. The disorders

CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.

XX SQ Sequence 13 BP; 4 A; 3 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 12; Length 13;

Best Local Similarity 100.0%; Pred. No. 4.7e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10

1111111111

DB 11 CGAACGTTTCG 2

RESULT 49

ADQ16823

ID ADQ16823 standard; DNA; 13 BP.

XX AC ADQ16823;

XX 07-OCT-2004 (first entry)

XX Immunomodulatory polynucleotide, SEQ ID NO 102.

XX Immunomodulatory polynucleotide; IMP; palindromic sequence; dinucleotide;
 KW trinucleotide; antimicrobial; antiallergic; antiasthmatic;
 KW dermatological; antiinflammatory; ophthalmological; immunosuppressive;
 KW antibacterial; vasotropic; antiparasitic; virucide; hepatotropic;
 KW anti-HIV; cytostatic; antiulcer; nephrotropic; vaccine; prophylactic; immune;
 KW T helper; (Th)2-type immune response; interferon; IFN-alpha;
 KW interferon-gamma; interferon-alpha; type I interferon; IFN-alpha;
 KW IFN-omega; IFN-gamma; plasmacytoid dendritic cell; ss.

XX Unidentified.

XX WO2004058179-A2.

XX 15-JUL-2004.

XX 18-DEC-2003; 2003WO-US041001.

XX 23-DEC-2002; 2002US-0436122P.

XX 13-FEB-2003; 2003US-0447885P.

XX 01-MAY-2003; 2003US-0467546P.

XX (DYNA-) DYNNAVX TECHNOLOGIES.

XX Dina D, Fearon KL, Marshall J;

XX WPI; 2004-525782/50.

XX Immunomodulatory polynucleotide useful for the treatment of e.g. atopic
 PT dermatitis comprises palindromic sequence comprising at least eight bases
 PT in length, which contains at least two dinucleotides and at least one
 PT trinucleotide.

XX Example 1; SEQ ID NO 102; 119pp; English.

XX The invention relates to a novel immunomodulatory polynucleotide (IMP)
 CC comprising a palindromic sequence. The palindromic sequence comprises at
 CC least 8 bases in length, which contains at least two dinucleotides (CG),
 CC and at least one trinucleotide (TCG) at or near the 5' end of the

CC polynucleotide. The CG dinucleotides are separated by 0 - 5 bases. The 5' T of the (TCG)y is positioned 0 - 3 bases from the 5' end of the polynucleotide. The (TCG)y is separated from the 5' end of the palindromic sequence by 0 - 2 bases. The palindromic sequence includes all or part of the (TCG)y sequence, where y=1 or 2. The immunomodulatory polynucleotides have the following activities: antimicrobial, antiallergic, antiasthmatic, dermatological, antiinflammatory, ophthalmological, immunosuppressive, antibacterial, vasotropic, antiparasitic, virucide, hepatotropic, anti-HIV, cytostatic, antiulcer, and nephrotropic. The immunomodulatory polynucleotides can be used for ameliorating a symptom of an infectious disease and IGE-related disorder. The IMP's may also be used for the treatment of a disorder associated with a T helper (TH)2-type immune response (e.g. allergies, allergy-induced asthma or atopic dermatitis), individuals receiving vaccines such as therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a mycobacterial epitope or a tumour associated epitope) or prophylactic vaccines. The IMP's can also be used for the treatment of e.g. food allergies, rhinitis, atopic dermatitis, conjunctivitis, urticaria, shock, Hymenoptera sting allergies and drug allergies and parasitic infections; viral disease e.g. Hepatitis B, Hepatitis C, influenza, Acquired immunodeficiency syndrome (AIDS) and Herpes zoster; and cancer; idiopathic pulmonary fibrosis, scleroderma, cutaneous radiation-induced fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic fibrosis, renal fibrosis. The IMP's may also be used to create a prophylactic vaccine to increase resistance to infection by bacterial or viral pathogens. The immunomodulatory polynucleotide modulates an immune response; or increases interferon-gamma; or interferon-alpha; effectively stimulates cytokines including type I interferons e.g. IFN-alpha and IFN-omega and IFN-gamma, production from human cells; effectively stimulates B cells to proliferate; and activates plasmacytoid dendritic cells to undergo maturation which can result in retardation of plasmacytoid dendritic cell apoptosis in culture. This polynucleotide sequence represents an immunomodulatory polynucleotide of the invention.

XX
SQ Sequence 13 BP; 3 A; 3 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 13; Length 13;
Best Local Similarity 100.0%; Pred. No. 4.7e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
DB |||||
2 CGAACGTTTCG 11

RESULT 50
ADQ16823/C
ID ADQ16823 standard; DNA; 13 BP.
XX
AC ADQ16823;
XX
DT 07-OCT-2004 (first entry)
XX
DE Immunomodulatory polynucleotide, SEQ ID No 102.
XX
KW Immunomodulatory polynucleotide; IMP; palindromic sequence; dinucleotide; trinucleotide; antimicrobial; antiallergic; antiasthmatic; dermatological; antiinflammatory; ophthalmological; immunosuppressive; antiparasitic; virucide; hepatotropic; anti-HIV; cytostatic; antiulcer; nephrotropic; IGE-related disorder; T helper; (TH)2-type immune response; vaccine; prophylactic; immune; interferon-gamma; interferon-alpha; type I interferon; IFN-alpha; IFN-omega; IFN-gamma; plasmacytoid dendritic cell; ss.
XX
OS Unidentified.
XX
PN WO2004058179-A2.
XX
PD 15-JUL-2004.
XX
PF 18-DEC-2003; 2003WO-US041001.
XX

PR 23-DEC-2002; 2002US-0436122P.
PR 13-FEB-2003; 2003US-0447885P.
PR 01-MAY-2003; 2003US-0467546P.
XX
PA (DYNA-) DYNAVAX TECHNOLOGIES.
XX
PI Dina D, Fearon KL, Marshall J;
XX WPI; 2004-525782/50.
DR
XX Immunomodulatory polynucleotide useful for the treatment of e.g. atopic dermatitis comprises palindromic sequence comprising at least eight bases in length, which contains at least two dinucleotides and at least one trinucleotide.
PT
XX Example 1; SEQ ID NO 102; 119pp; English.
XX
CC The invention relates to a novel immunomodulatory polynucleotide (IMP) comprising a palindromic sequence. The palindromic sequence comprises at least 8 bases in length, which contains at least two dinucleotides (CG), and at least one trinucleotide (TCG)y at or near the 5' end of the polynucleotide. The CG dinucleotides are separated by 0 - 5 bases. The 5' T of the (TCG)y is positioned 0 - 3 bases from the 5' end of the polynucleotide. The (TCG)y is separated from the 5' end of the palindromic sequence by 0 - 2 bases. The palindromic sequence includes all or part of the (TCG)y sequence, where y=1 or 2. The immunomodulatory polynucleotides have the following activities: antimicrobial, antiallergic, antiasthmatic, dermatological, antiinflammatory, ophthalmological, immunosuppressive, antibacterial, vasotropic, antiparasitic, virucide, hepatotropic, anti-HIV, cytostatic, antiulcer, and nephrotropic. The immunomodulatory polynucleotides can be used for ameliorating a symptom of an infectious disease and IGE-related disorder. The IMP's may also be used for the treatment of a disorder associated with a T helper (TH)2-type immune response (e.g. allergies, allergy-induced asthma or atopic dermatitis), individuals receiving vaccines such as therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a mycobacterial epitope or a tumour associated epitope) or prophylactic vaccines. The IMP's can also be used for the treatment of e.g. food allergies, rhinitis, atopic dermatitis, conjunctivitis, urticaria, shock, Hymenoptera sting allergies and drug allergies and parasitic infections; viral disease e.g. Hepatitis B, Hepatitis C, influenza, Acquired immunodeficiency syndrome (AIDS) and Herpes zoster; and cancer; idiopathic pulmonary fibrosis, scleroderma, cutaneous radiation-induced fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic fibrosis, renal fibrosis. The IMP's may also be used to create a prophylactic vaccine to increase resistance to infection by bacterial or viral pathogens. The immunomodulatory polynucleotide modulates an immune response; or increases interferon-gamma; or interferon-alpha; effectively stimulates cytokines including type I interferons e.g. IFN-alpha and IFN-omega and IFN-gamma, production from human cells; effectively stimulates B cells to proliferate; and activates plasmacytoid dendritic cells to undergo maturation which can result in retardation of plasmacytoid dendritic cell apoptosis in culture. This polynucleotide sequence represents an immunomodulatory polynucleotide of the invention.

XX
SQ Sequence 13 BP; 3 A; 3 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 13; Length 13;
Best Local Similarity 100.0%; Pred. No. 4.7e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
DB |||||
11 CGAACGTTTCG 2

RESULT 51
ABQ75377
ID ABQ75377 standard; DNA; 14 BP.
XX
AC ABQ75377;
XX

DT 05-NOV-2002 (first entry)
 XX ISS immunomodulatory oligonucleotide SEQ ID NO:98.
 DE
 XX Immunostimulatory sequence; ISS: immunomodulatory; immune response;
 KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
 KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
 KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
 KW immunoglobulin E; IgE-related disorder; antiallergic; antiasthmatic;
 KW virucide; antibacterial; protozoacide; ss.
 XX Synthetic.
 OS
 XX WO200252002-A2.
 PN
 XX 04-JUL-2002.
 PD
 XX 27-DEC-2001; 2001WO-US050821.
 PF
 XX 27-DEC-2000; 2000US-0258675P.
 PR
 XX (DYNA-) DYNVAX TECHNOLOGIES CORP.
 PA
 XX Fearon KL, Dina D;
 PI
 XX WPI; 2002-657426/70.
 DR
 XX Immunomodulatory polynucleotide for modulating an immune response in a
 PT subject suffering from disorders associated with Th2-type immune
 PT response, e.g. allergy, or infectious disease, comprises an
 PT immunostimulatory sequence.
 PT
 XX Disclosure; Page 23; 95pp; English.
 PS
 XX The present invention describes an immunomodulatory polynucleotide (I)
 CC comprising an immunostimulatory sequence (ISS). Also described: (1) an
 CC immunomodulatory composition comprising (I); (2) an immunomodulatory
 CC polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a
 CC biodegradable MC, where the MC is less than 10 micrometre in size; and
 CC (3) a kit comprising (I). (I) has antiallergic, antiasthmatic, virucide,
 CC antibacterial and protozoacide activities, and can be used as a modulator
 CC of immune response. (I) is useful for modulating an immune response in an
 CC individual suffering from disorders associated with a Th2-type immune
 CC response, especially an allergy or asthma, or an infectious disease. (I)
 CC is also useful for increasing interferon-gamma (IFN-gamma) in an
 CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
 CC individual having a viral infection. (I) is further useful for
 CC ameliorating a symptom of an infectious disease caused by a cellular
 CC pathogen such as mycobacterial disease, malaria, leishmaniasis,
 CC toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a
 CC symptom of an immunoglobulin E (IgE)-related disorder, preferably an
 CC allergy-related disorder, in particular asthma in an individual. The
 CC present sequence represents an immunomodulatory oligonucleotide from the
 CC present invention
 XX
 SQ Sequence 14 BP; 2 A; 4 C; 4 G; 4 T; 0 U; 0 Other;
 Query Match 100.0%; Score 10; DB 6; Length 14;
 Best Local Similarity 100.0%; Pred. NO. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 CGAACGTTTCG 10
 DB 5 CGAACGTTTCG 14
 RESULT 52
 ABQ75377/c
 ID ABQ75377 standard; DNA; 14 BP.
 XX
 AC ABQ75377;
 XX
 DT 05-NOV-2002 (first entry)

XX ISS immunomodulatory oligonucleotide SEQ ID NO:98.
 DE
 XX Immunostimulatory sequence; ISS: immunomodulatory; immune response;
 KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
 KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
 KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
 KW immunoglobulin E; IgE-related disorder; antiallergic; antiasthmatic;
 KW virucide; antibacterial; protozoacide; ss.
 XX Synthetic.
 OS
 XX WO200252002-A2.
 PN
 XX 04-JUL-2002.
 PD
 XX 27-DEC-2001; 2001WO-US050821.
 PF
 XX 27-DEC-2000; 2000US-0258675P.
 PR
 XX (DYNA-) DYNVAX TECHNOLOGIES CORP.
 PA
 XX Fearon KL, Dina D;
 PI
 XX WPI; 2002-657426/70.
 DR
 XX Immunomodulatory polynucleotide for modulating an immune response in a
 PT subject suffering from disorders associated with Th2-type immune
 PT response, e.g. allergy, or infectious disease, comprises an
 PT immunostimulatory sequence.
 PT
 XX Disclosure; Page 23; 95pp; English.
 PS
 XX The present invention describes an immunomodulatory polynucleotide (I)
 CC comprising an immunostimulatory sequence (ISS). Also described: (1) an
 CC immunomodulatory composition comprising (I); (2) an immunomodulatory
 CC polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a
 CC biodegradable MC, where the MC is less than 10 micrometre in size; and
 CC (3) a kit comprising (I). (I) has antiallergic, antiasthmatic, virucide,
 CC antibacterial and protozoacide activities, and can be used as a modulator
 CC of immune response. (I) is useful for modulating an immune response in an
 CC individual suffering from disorders associated with a Th2-type immune
 CC response, especially an allergy or asthma, or an infectious disease. (I)
 CC is also useful for increasing interferon-gamma (IFN-gamma) in an
 CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
 CC individual having a viral infection. (I) is further useful for
 CC ameliorating a symptom of an infectious disease caused by a cellular
 CC pathogen such as mycobacterial disease, malaria, leishmaniasis,
 CC toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a
 CC symptom of an immunoglobulin E (IgE)-related disorder, preferably an
 CC allergy-related disorder, in particular asthma in an individual. The
 CC present sequence represents an immunomodulatory oligonucleotide from the
 CC present invention
 XX
 SQ Sequence 14 BP; 2 A; 4 C; 4 G; 4 T; 0 U; 0 Other;
 Query Match 100.0%; Score 10; DB 6; Length 14;
 Best Local Similarity 100.0%; Pred. NO. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 CGAACGTTTCG 10
 DB 14 CGAACGTTTCG 5
 RESULT 53
 ADB88895
 ID ADB88895 standard; DNA; 14 BP.
 XX
 AC ADB88895;
 XX
 DT 04-DEC-2003 (first entry)
 XX

DE Chimeric immunomodulatory compound DNA sequence, SEQ ID No 98.

XX chimeric immunomodulatory compound; CIC; immunomodulatory activity;
 KW spacer moiety; linear hexaethylene glycol structure; HEG; immune;
 KW Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma;
 KW IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating;
 KW immunoglobulin E; IGE; allergy; cancer;
 KW stimulating cellular immune system cell; ss.

OS Synthetic.

XX WO2003000922-A2.

XX 03-JAN-2003.

XX 21-JUN-2002; 2002WO-US020025.

XX 21-JUN-2001; 2001US-0299883P.

XX 23-APR-2002; 2002US-0375253P.

XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX Fearon KL, Dina D, Tuck SF;

XX WPI; 2003-210159/20.

XX Novel chimeric immunomodulatory compound having immunomodulatory
 PT activity, useful for modulating an immune response and for treating
 PT cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.

PS Disclosure; Page 35; 224pp; English.

XX The invention relates to a novel chimeric immunomodulatory compound (CIC)
 CC having immunomodulatory activity, comprising two or more nucleic acid
 CC moieties and one or more non-nucleic acid spacer moieties, where at least
 CC one non-nucleic acid spacer moiety is covalently joined to two nucleic
 CC acid moieties, where the spacer is not a polypeptide, and at least one
 CC nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric
 CC immunomodulatory compounds more specifically contain the nucleic acid
 CC spacer moieties of linear hexaethylene glycol structure (HEG) subunits.
 CC CIC's are useful for modulating an immune response in an individual,
 CC where the individual suffers from a disorder associated with a Th2-type
 CC immune response which is an allergy or allergy-induced asthma, and an
 CC infectious disease. CIC is also useful for increasing IFN-gamma, and an
 CC alpha; in an individual, where the individual has idiopathic pulmonary
 CC fibrosis, or a viral infection. CIC's are useful for ameliorating a
 CC symptom of an infectious disease, or an immunoglobulin E (IGE)-related
 CC disorder in an individual, where the IGE-related disorder is allergy, or
 CC an allergy-related disorder. CIC's are also useful for treating cancer
 CC and can be used for stimulating cellular immune system cells production
 CC in an individual. This polynucleotide sequence represents a DNA sequence
 CC which is a nucleic acid moiety part of a chimeric immunomodulatory compound
 CC of the invention.

XX SQ Sequence 14 BP; 2 A; 4 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 9; Length 14;

Best Local Similarity 100.0%; Pred. No. 4.7e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAAGCTTCG 10

Db 5 CGAAGCTTCG 14

RESULT 54

ADB8895/c

ID ADB8895 standard; DNA; 14 BP.

XX ADB8895;

XX 04-DEC-2003 (first entry)

XX

DE Chimeric immunomodulatory compound DNA sequence, SEQ ID No 98.

XX chimeric immunomodulatory compound; CIC; immunomodulatory activity;
 KW spacer moiety; linear hexaethylene glycol structure; HEG; immune;
 KW Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma;
 KW IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating;
 KW immunoglobulin E; IGE; allergy; cancer;
 KW stimulating cellular immune system cell; ss.

OS Synthetic.

XX WO2003000922-A2.

XX 03-JAN-2003.

XX 21-JUN-2002; 2002WO-US020025.

XX 21-JUN-2001; 2001US-0299883P.

XX 23-APR-2002; 2002US-0375253P.

XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX Fearon KL, Dina D, Tuck SF;

XX WPI; 2003-210159/20.

XX Novel chimeric immunomodulatory compound having immunomodulatory
 PT activity, useful for modulating an immune response and for treating
 PT cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.

PS Disclosure; Page 35; 224pp; English.

XX The invention relates to a novel chimeric immunomodulatory compound (CIC)
 CC having immunomodulatory activity, comprising two or more nucleic acid
 CC moieties and one or more non-nucleic acid spacer moieties, where at least
 CC one non-nucleic acid spacer moiety is covalently joined to two nucleic
 CC acid moieties, where the spacer is not a polypeptide, and at least one
 CC nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric
 CC immunomodulatory compounds more specifically contain the nucleic acid
 CC spacer moieties of linear hexaethylene glycol structure (HEG) subunits.
 CC CIC's are useful for modulating an immune response in an individual,
 CC where the individual suffers from a disorder associated with a Th2-type
 CC immune response which is an allergy or allergy-induced asthma, and an
 CC infectious disease. CIC is also useful for increasing IFN-gamma, and an
 CC alpha; in an individual, where the individual has idiopathic pulmonary
 CC fibrosis, or a viral infection. CIC's are useful for ameliorating a
 CC symptom of an infectious disease, or an immunoglobulin E (IGE)-related
 CC disorder in an individual, where the IGE-related disorder is allergy, or
 CC an allergy-related disorder. CIC's are also useful for treating cancer
 CC and can be used for stimulating cellular immune system cells production
 CC in an individual. This polynucleotide sequence represents a DNA sequence
 CC which is a nucleic acid moiety part of a chimeric immunomodulatory compound
 CC of the invention.

XX SQ Sequence 14 BP; 2 A; 4 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 9; Length 14;

Best Local Similarity 100.0%; Pred. No. 4.7e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAAGCTTCG 10

Db 14 CGAAGCTTCG 5

RESULT 55

ADB88901

ID ADB88901 standard; DNA; 14 BP.

XX ADB88901;

XX 04-DEC-2003 (first entry)

XX

Chimeric immunomodulatory compound DNA sequence, SEQ ID NO 104.

Chimeric immunomodulatory compound; CIC: immunomodulatory activity; spacer moiety; linear hexaethylene glycol structure; HEG; immune; Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma; IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating; immunoglobulin E; IgE; allergy; cancer; stimulating cellular immune system cell; ss.

Synthetic.

WO200300922-A2.

03-JAN-2003.

21-JUN-2002; 2002WO-US020025.

21-JUN-2001; 2001US-0299883P.

23-APR-2002; 2002US-0375253P.

(DYNA-) DYNAVAX TECHNOLOGIES CORP.

Fearon KL, Dina D, Tuck SF;

WPI; 2003-210159/20.

Novel chimeric immunomodulatory compound having immunomodulatory activity, useful for modulating an immune response and for treating cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.

Disclosure; Page 36; 224pp; English.

The invention relates to a novel chimeric immunomodulatory compound (CIC) having immunomodulatory activity, comprising two or more nucleic acid moieties and one or more non-nucleic acid spacer moieties, where at least one non-nucleic acid spacer moiety is covalently joined to two nucleic acid moieties, where the spacer is not a polypeptide, and at least one nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric immunomodulatory compounds more specifically contain the nucleic acid spacer moieties of linear hexaethylene glycol structure (HEG) subunits. CIC's are useful for modulating an immune response in an individual, where the individual suffers from a disorder associated with a Th2-type immune response which is an allergy or allergy-induced asthma, and an infectious disease. CIC is also useful for increasing IFN-gamma, or IFN-alpha; in an individual, where the individual has idiopathic pulmonary fibrosis, or a viral infection. CIC's are useful for ameliorating a symptom of an infectious disease, or an immunoglobulin E (IgE)-related disorder in an individual, where the IgE-related disorder is allergy, or an allergy-related disorder. CIC's are also useful for treating cancer and can be used for stimulating cellular immune system cells production in an individual. This polynucleotide sequence represents a DNA sequence of the invention.

Sequence 14 BP; 2 A; 4 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 9; Length 14;
Best Local Similarity 100.0%; Pred. No. 4.7e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10

Db 5 CGAACGTTTCG 14

RESULT 56

ADB88901/C

ID ADB88901 standard; DNA; 14 BP.

XX ADB88901;

XX 04-DEC-2003 (first entry)

XX

Chimeric immunomodulatory compound DNA sequence, SEQ ID NO 104.

Chimeric immunomodulatory compound; CIC: immunomodulatory activity; spacer moiety; linear hexaethylene glycol structure; HEG; immune; Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma; IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating; immunoglobulin E; IgE; allergy; cancer; stimulating cellular immune system cell; ss.

Synthetic.

WO200300922-A2.

03-JAN-2003.

21-JUN-2002; 2002WO-US020025.

21-JUN-2001; 2001US-0299883P.

23-APR-2002; 2002US-0375253P.

(DYNA-) DYNAVAX TECHNOLOGIES CORP.

Fearon KL, Dina D, Tuck SF;

WPI; 2003-210159/20.

Novel chimeric immunomodulatory compound having immunomodulatory activity, useful for modulating an immune response and for treating cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.

Disclosure; Page 36; 224pp; English.

The invention relates to a novel chimeric immunomodulatory compound (CIC) having immunomodulatory activity, comprising two or more nucleic acid moieties and one or more non-nucleic acid spacer moieties, where at least one non-nucleic acid spacer moiety is covalently joined to two nucleic acid moieties, where the spacer is not a polypeptide, and at least one nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric immunomodulatory compounds more specifically contain the nucleic acid spacer moieties of linear hexaethylene glycol structure (HEG) subunits. CIC's are useful for modulating an immune response in an individual, where the individual suffers from a disorder associated with a Th2-type immune response which is an allergy or allergy-induced asthma, and an infectious disease. CIC is also useful for increasing IFN-gamma, or IFN-alpha; in an individual, where the individual has idiopathic pulmonary fibrosis, or a viral infection. CIC's are useful for ameliorating a symptom of an infectious disease, or an immunoglobulin E (IgE)-related disorder in an individual, where the IgE-related disorder is allergy, or an allergy-related disorder. CIC's are also useful for treating cancer and can be used for stimulating cellular immune system cells production in an individual. This polynucleotide sequence represents a DNA sequence of the invention.

Sequence 14 BP; 2 A; 4 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 9; Length 14;
Best Local Similarity 100.0%; Pred. No. 4.7e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10

Db 14 CGAACGTTTCG 5

RESULT 57

ADK67588

ID ADK67588 standard; DNA; 14 BP.

XX ADK67588;

XX 06-MAY-2004 (first entry)

XX

DE Immunostimulant oligonucleotide 14TCG, for immunomodulatory composition.
 XX Immunomodulator; immunostimulant; vaccine; ss.
 XX Synthetic.
 OS
 XX WO2004014322-A2.
 PN
 XX 19-FEB-2004.
 PD
 XX 12-AUG-2003; 2003WO-US025415.
 PF
 XX 12-AUG-2002; 2002US-0402968P.
 PR
 XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 PA
 XX Van Nest G, Tuck S;
 PI
 XX WPI; 2004-238627/22.
 DR
 XX Immunomodulatory composition useful for modulating immune responses in
 PT individuals, comprises immunomodulatory particles or a particulate
 PT composition made by mixing cationic condensing agent and an
 PT immunomodulatory compound.
 XX
 PS Example 4; SEQ ID NO 18; 90pp; English.
 XX
 CC The present sequence is that of an immunomodulatory compound (IMC),
 CC designated 14TCG, that can be used in novel immunomodulatory compositions
 CC of the invention. The IMC may contain modifications of the 3'OH or 5'OH
 CC group, the nucleotide base, the sugar component and phosphate group.
 CC Novel immunomodulatory compositions of the invention comprise a cationic
 CC condensing agent, an IMC comprising the nucleotide sequence 5'-CG-3', and
 CC a stabilising agent. The compositions form particles which have increased
 CC immunomodulatory activity as compared to IMCs not formulated in the
 CC compositions of the invention. The immunomodulatory compositions can be
 CC used for immunomodulation of an individual, e.g. when the individual
 CC suffers from a disorder associated with a Th2-type immune response (e.g.
 CC allergies or allergy-induced asthma), is receiving vaccines such as
 CC therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a
 CC mycobacterial epitope or a tumour associated epitope) or prophylactic
 CC vaccines, suffers from cancer, suffers from an infectious disease or is
 CC at risk of exposure to an infectious agent. In an example from the
 CC invention, IMC 14TCG was used to examine immunomodulation of human cells
 CC with particulate compositions incorporating a panel of IMC
 CC oligonucleotides.
 XX
 SQ Sequence 14 BP; 2 A; 4 C; 4 G; 4 T; 0 U; 0 Other;
 Query Match 100.0%; Score 10; DB 12; Length 14;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 CGAACGTTTCG 10
 Db |||||
 5 CGAACGTTTCG 14
 RESULT 58
 ADK67588/c
 ID ADK67588 standard; DNA; 14 BP.
 XX
 AC ADK67588;
 XX
 DT 06-MAY-2004 (first entry)
 XX
 DE Immunostimulant oligonucleotide 14TCG, for immunomodulatory composition.
 XX Immunomodulator; immunostimulant; vaccine; ss.
 XX Synthetic.
 OS
 XX WO2004014322-A2.
 PN

XX 19-FEB-2004.
 XX 12-AUG-2003; 2003WO-US025415.
 PF
 XX 12-AUG-2002; 2002US-0402968P.
 PR
 XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 PA
 XX Van Nest G, Tuck S;
 PI
 XX WPI; 2004-238627/22.
 DR
 XX Immunomodulatory composition useful for modulating immune responses in
 PT individuals, comprises immunomodulatory particles or a particulate
 PT composition made by mixing cationic condensing agent and an
 PT immunomodulatory compound.
 XX
 PS Example 4; SEQ ID NO 18; 90pp; English.
 XX
 CC The present sequence is that of an immunomodulatory compound (IMC),
 CC designated 14TCG, that can be used in novel immunomodulatory compositions
 CC of the invention. The IMC may contain modifications of the 3'OH or 5'OH
 CC group, the nucleotide base, the sugar component and phosphate group.
 CC Novel immunomodulatory compositions of the invention comprise a cationic
 CC condensing agent, an IMC comprising the nucleotide sequence 5'-CG-3', and
 CC a stabilising agent. The compositions form particles which have increased
 CC immunomodulatory activity as compared to IMCs not formulated in the
 CC compositions of the invention. The immunomodulatory compositions can be
 CC used for immunomodulation of an individual, e.g. when the individual
 CC suffers from a disorder associated with a Th2-type immune response (e.g.
 CC allergies or allergy-induced asthma), is receiving vaccines such as
 CC therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a
 CC mycobacterial epitope or a tumour associated epitope) or prophylactic
 CC vaccines, suffers from cancer, suffers from an infectious disease or is
 CC at risk of exposure to an infectious agent. In an example from the
 CC invention, IMC 14TCG was used to examine immunomodulation of human cells
 CC with particulate compositions incorporating a panel of IMC
 CC oligonucleotides.
 XX
 SQ Sequence 14 BP; 2 A; 4 C; 4 G; 4 T; 0 U; 0 Other;
 Query Match 100.0%; Score 10; DB 12; Length 14;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 CGAACGTTTCG 10
 Db |||||
 14 CGAACGTTTCG 5
 RESULT 59
 ADQ95381
 ID ADQ95381 standard; DNA; 14 BP.
 XX
 AC ADQ95381;
 XX
 DT 07-OCT-2004 (first entry)
 XX
 DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 123.
 XX
 KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Anticancer;
 KW Gastrointestinal; Nephrotropic; Branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 XX IFN-alpha; ss.
 OS Synthetic.
 XX
 XX Key Location/Qualifiers
 FT modified_base 5

```

FT FT /*tag= a
FT FT /mod_base= OTHER
FT FT /note= "c= 5-bromocytosine"
XX
XX WO2004058159-A2.
XX
XX 15-JUL-2004.
XX
XX 17-DEC-2003; 2003WO-US040417.
XX
XX 23-DEC-2002; 2002US-0436406P.
XX
XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
XX
XX Fearon KL;
XX
XX WPI; 2004-561515/54.
XX
XX New branched immunomodulatory compound comprising at least three nucleic
XX acid moieties and at least one branch-point nucleoside, useful for
XX modulating an immune response in individual suffering e.g. allergy.
XX
XX Disclosure; SEQ ID NO 123; 183pp; English.
XX
XX The present invention relates to novel branched immunomodulatory
XX compounds (BIC) comprising at least three nucleic acid moieties, at least
XX one of which comprises the nucleotide sequence 5'-CG-3', and at least one
XX branch-point nucleoside. The BIC compounds has immunomodulatory activity
XX e.g. the ability to stimulate interferon (IFN)-gamma production from
XX human peripheral blood mononuclear cells, the ability to stimulate IFN-
XX alpha production from human peripheral blood mononuclear cells and the
XX ability to stimulate B cell proliferation. The BIC compounds are useful
XX for modulating an immune response in an individual suffering from a
XX disorder associated with a T helper (Th)2-type immune response e.g.
XX allergy, allergy-induced asthma or an infectious disease; for increasing
XX secretion of IFN-gamma by blood cells in an individual. The BIC compounds
XX are also useful for immunomodulation of cells and individuals; in the
XX fields of biomedicine and immunology; for the manufacture of a medicament
XX ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
XX hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
XX ameliorating an IGE-related disorder in an individual. The disorders
XX includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
XX eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
XX cancer; infectious disease resistant to humoral immune responses (e.g.
XX diseases caused by mycobacterial infections and intracellular pathogens,
XX cellular pathogens e.g. bacteria or protozoans or by subcellular
XX pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
XX leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
XX caused by intracellular parasites such as malaria; leishmaniasis,
XX toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
XX disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
XX induced fibrosis, hepatic fibrosis including schistosomiasis-induced
XX hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
XX the BIC compounds of the invention.
XX
XX Sequence 14 BP; 2 A; 4 C; 4 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 100.0%; Score 10; DB 12; Length 14;
XX Best Local Similarity 100.0%; Pred. No. 4.7e+03;
XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 1 CGAACGTCG 10
XX |||||||||
XX 5 CGAACGTCG 14
XX
XX RESULT 60
XX ADQ95381/c
XX ID ADQ95381 standard; DNA; 14 BP.
XX
XX AC ADQ95381;
XX
XX DT 07-OCT-2004 (first entry)

```

```

XX
XX DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 123.
XX
XX KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulatory; Respiratory;
XX Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
XX Dermatology; Immunosuppressive; Cytostatic; Protozoacide;
XX Tuberculosstatic; Antileprotic; Antiparasitic; Antimalarial; Antitumor;
XX Gastrointestinal; Nephrotropic; Branched immunomodulatory compound;
XX immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
XX IFN-alpha; ss.
XX
XX OS Synthetic.
XX
XX FH Key Location/Qualifiers
XX FT modified_base 5 /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "c= 5-bromocytosine"
XX
XX WO2004058159-A2.
XX
XX 15-JUL-2004.
XX
XX 17-DEC-2003; 2003WO-US040417.
XX
XX 23-DEC-2002; 2002US-0436406P.
XX
XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
XX
XX Fearon KL;
XX
XX WPI; 2004-561515/54.
XX
XX New branched immunomodulatory compound comprising at least three nucleic
XX acid moieties and at least one branch-point nucleoside, useful for
XX modulating an immune response in individual suffering e.g. allergy.
XX
XX Disclosure; SEQ ID NO 123; 183pp; English.
XX
XX The present invention relates to novel branched immunomodulatory
XX compounds (BIC) comprising at least three nucleic acid moieties, at least
XX one of which comprises the nucleotide sequence 5'-CG-3', and at least one
XX branch-point nucleoside. The BIC compounds has immunomodulatory activity
XX e.g. the ability to stimulate interferon (IFN)-gamma production from
XX human peripheral blood mononuclear cells, the ability to stimulate IFN-
XX alpha production from human peripheral blood mononuclear cells and the
XX ability to stimulate B cell proliferation. The BIC compounds are useful
XX for modulating an immune response in an individual suffering from a
XX disorder associated with a T helper (Th)2-type immune response e.g.
XX allergy, allergy-induced asthma or an infectious disease; for increasing
XX secretion of IFN-gamma by blood cells in an individual. The BIC compounds
XX are also useful for immunomodulation of cells and individuals; in the
XX fields of biomedicine and immunology; for the manufacture of a medicament
XX ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
XX hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
XX ameliorating an IGE-related disorder in an individual. The disorders
XX includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
XX eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
XX cancer; infectious disease resistant to humoral immune responses (e.g.
XX diseases caused by mycobacterial infections and intracellular pathogens,
XX cellular pathogens e.g. bacteria or protozoans or by subcellular
XX pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
XX leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
XX caused by intracellular parasites such as malaria; leishmaniasis,
XX toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
XX disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
XX induced fibrosis, hepatic fibrosis including schistosomiasis-induced
XX hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
XX the BIC compounds of the invention.
XX
XX Sequence 14 BP; 2 A; 4 C; 4 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 100.0%; Score 10; DB 12; Length 14;
XX
XX 1 CGAACGTCG 10
XX |||||||||
XX 5 CGAACGTCG 14
XX
XX RESULT 60
XX ADQ95381/c
XX ID ADQ95381 standard; DNA; 14 BP.
XX
XX AC ADQ95381;
XX
XX DT 07-OCT-2004 (first entry)

```

Best Local Similarity 100.0%; Pred. No. 4.7e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 14 CGAACGTTTCG 5

RESULT 61
ADQ95391
ID ADQ95391 standard; DNA; 14 BP.
XX
AC ADQ95391;
XX
DT 07-OCT-2004 (first entry)
XX
DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 133.
XX
KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
KW Virucide; Antiinflammatory; Hepatotrophic; Anti-HIV; Auditory;
KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
KW Gastrointestinal; Nephrotrophic; branched immunomodulatory compound;
KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
KW IFN-alpha; ss.
XX
OS Synthetic.

Key Location/Qualifiers
modified_base 5 /tag= a
/mod_base= OTHER
/note= "C= 5-bromocytosine"
modified_base 9 /tag= b
/mod_base= OTHER
/note= "C= 5-bromocytosine"

WO2004058159-A2.
15-JUL-2004.
17-DEC-2003; 2003WO-US040417.
23-DEC-2002; 2002US-0436406P.
(DYNA-) DYNAVAX TECHNOLOGIES CORP.
Fearon KL;
WPI; 2004-561515/54.
New branched immunomodulatory compound comprising at least three nucleic acid moieties and at least one branch-point nucleoside, useful for modulating an immune response in individual suffering e.g. allergy.
Disclosure; SEQ ID NO 133; 183pp; English.

The present invention relates to novel branched immunomodulatory compounds (BIC) comprising at least three nucleic acid moieties, at least one of which comprises the nucleotide sequence 5'-CG-3', and at least one branch-point nucleoside. The BIC compounds has immunomodulatory activity e.g. the ability to stimulate interferon (IFN)-gamma production from human peripheral blood mononuclear cells, the ability to stimulate IFN-alpha production from human peripheral blood mononuclear cells and the ability to stimulate B cell proliferation. The BIC compounds are useful for modulating an immune response in an individual suffering from a disorder associated with a T helper (Th)2-type immune response e.g. allergy, allergy-induced asthma or an infectious disease; for increasing secretion of IFN-gamma by blood cells in an individual. The BIC compounds are also useful for immunomodulation of cells and individuals; in the fields of biomedicine and immunology; for the manufacture of a medicament ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.

CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
CC ameliorating an Igb-related disorder in an individual. The disorders
CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
CC cancer; infectious disease resistant to humoral immune responses (e.g.
CC diseases caused by mycobacterial infections and intracellular pathogens,
CC cellular pathogens e.g. bacteria or protozoans or by subcellular
CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
CC leprosy or M. Marimum or M. ulcerans infections; herpes viruses; diseases
CC caused by intracellular parasites such as malaria; leishmaniasis,
CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
CC the BIC compounds of the invention.
XX
SQ Sequence 14 BP; 2 A; 4 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 12; Length 14;
Best Local Similarity 100.0%; Pred. No. 4.7e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 5 CGAACGTTTCG 14

RESULT 62
ADQ95391/C
ID ADQ95391 standard; DNA; 14 BP.
XX
AC ADQ95391;
XX
DT 07-OCT-2004 (first entry)
XX
DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 133.
XX
KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
KW Virucide; Antiinflammatory; Hepatotrophic; Anti-HIV; Auditory;
KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
KW Gastrointestinal; Nephrotrophic; branched immunomodulatory compound;
KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
KW IFN-alpha; ss.
XX
OS Synthetic.

Key Location/Qualifiers
modified_base 5 /tag= a
/mod_base= OTHER
/note= "C= 5-bromocytosine"
modified_base 9 /tag= b
/mod_base= OTHER
/note= "C= 5-bromocytosine"

WO2004058159-A2.
15-JUL-2004.
17-DEC-2003; 2003WO-US040417.
23-DEC-2002; 2002US-0436406P.
(DYNA-) DYNAVAX TECHNOLOGIES CORP.
Fearon KL;
WPI; 2004-561515/54.
New branched immunomodulatory compound comprising at least three nucleic acid moieties and at least one branch-point nucleoside, useful for

PT modulating an immune response in individual suffering e.g. allergy.
 PS Disclosure; SEQ ID NO 133; 183pp; English.
 XX
 CC The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IGE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by tuberculosis,
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 SQ Sequence 14 BP; 2 A; 4 C; 4 G; 4 T; 0 U; 0 Other;
 Query Match 100.0%; Score 10; DB 12; Length 14;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 CGAACGTTTCG 10
 Db 14 CGAACGTTTCG 5
 RESULT 63
 ADQ95358
 ID ADQ95358 standard; DNA; 14 BP.
 AC ADQ95358;
 XX
 XX 07-OCT-2004 (first entry)
 XX
 XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 100.
 XX
 KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-EIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; Branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.
 XX
 OS Synthetic.
 XX
 XX Key Location/Qualifiers
 FH modified_base 2 /*tag= a
 FT /mod_base= OTHER
 FT /note= "c= 5-bromocytosine"
 FT 5
 FT modified_base 5
 FT /*tag= b

FT
 FT
 XX
 PN /mod_base= OTHER
 /note= "c= 5-bromocytosine"
 WO2004059159-A2.
 XX
 PD 15-JUL-2004.
 XX
 PF 17-DEC-2003; 2003WO-US040417.
 XX
 XX 23-DEC-2002; 2002US-0436406P.
 XX
 PA (DYNA-) DYNAXVAX TECHNOLOGIES CORP.
 XX
 PI Fearon KL;
 XX
 XX WPI; 2004-561515/54.
 XX
 XX New branched immunomodulatory compound comprising at least three nucleic
 XX acid moieties and at least one branch-point nucleoside useful for
 XX PT modulating an immune response in individual suffering e.g. allergy.
 XX
 XX Disclosure; SEQ ID NO 100; 183pp; English.
 XX
 CC The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IGE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by tuberculosis,
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 SQ Sequence 14 BP; 2 A; 4 C; 4 G; 4 T; 0 U; 0 Other;
 Query Match 100.0%; Score 10; DB 12; Length 14;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 CGAACGTTTCG 10
 Db 5 CGAACGTTTCG 14
 RESULT 64
 ADQ95358/c
 ID ADQ95358 standard; DNA; 14 BP.
 XX
 AC ADQ95358;
 XX
 XX 07-OCT-2004 (first entry)
 XX

Branched immunomodulatory compound related oligonucleotide, SEQ ID 100.

Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory; Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory; Dermatologic; Immunosuppressive; Cytostatic; Protozoacide; Tuberculostatic; Antileptotic; Antiparasitic; Antimalarial; Antiulcer; Gastrointestinal; Nephrotropic; branched immunomodulatory compound; immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha; IFN-alpha; ss.

Synthetic.

Key Location/Qualifiers
modified_base 2 /*tag= a
/mod_base= OTHER
/note= "c= 5-bromocytosine"
modified_base 5 /*tag= b
/mod_base= OTHER
/note= "c= 5-bromocytosine"
WO2004058159-A2.
15-JUL-2004.
17-DEC-2003; 2003WO-US040417.
23-DEC-2002; 2002US-0436406P.
(DYNA-) DYNAVAX TECHNOLOGIES CORP.
Fearon KL;
WPI; 2004-561515/54.
New branched immunomodulatory compound comprising at least three nucleic acid moieties and at least one branch-point nucleoside, useful for modulating an immune response in individual suffering e.g. allergy.
Disclosure; SEQ ID NO 100; 183pp; English.

The present invention relates to novel branched immunomodulatory compounds (BIC) comprising at least three nucleic acid moieties, at least one of which comprises the nucleotide sequence 5'-CG-3', and at least one branch-point nucleoside. The BIC compounds has immunomodulatory activity e.g. the ability to stimulate interferon (IFN)-gamma production from human peripheral blood mononuclear cells, the ability to stimulate IFN-alpha production from human peripheral blood mononuclear cells and the ability to stimulate B cell proliferation. The BIC compounds are useful for modulating an immune response in an individual suffering from a disorder associated with a T helper (Th)2-type immune response e.g. allergy, allergy-induced asthma or an infectious disease; for increasing secretion of IFN-gamma by blood cells in an individual. The BIC compounds are also useful for immunomodulation of cells and individuals; in the fields of biomedicine and immunology; for the manufacture of a medicament; for treating idiopathic pulmonary fibrosis, viral infection (e.g. hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for ameliorating an Igs-related disorder in an individual. The disorders includes atopic dermatitis, eosinophilic gastrointestinal inflammation, eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis; cancer; infectious disease resistant to humoral immune responses (e.g. diseases caused by mycobacterial infections and intracellular pathogens, cellular pathogens e.g. bacteria or protozoans or by subcellular pathogens e.g. viruses); mycobacterial diseases such as tuberculosis, leprosy or M. Marium or Mycobacterium infections; herpes viruses; diseases caused by intracellular parasites such as malaria; leishmaniasis, toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory disorders e.g. ulcerative colitis, scleroderma, cutaneous radiation-induced fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in the BIC compounds of the invention.

SEQ Sequence 14 BP; 2 A; 4 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 12; Length 14;
Best Local Similarity 100.0%; Pred. No. 4.7e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
| | | | |
Db 14 CGAACGTTTCG 5

RESULT 65
ADQ95356
ID ADQ95356 standard; DNA; 14 BP.
XX
AC ADQ95356;
XX
DT 07-OCT-2004 (first entry)
XX
DE
XX
KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
KW Dermatologic; Immunosuppressive; Cytostatic; Protozoacide;
KW Tuberculostatic; Antileptotic; Antiparasitic; Antimalarial; Antiulcer;
KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
KW IFN-alpha; ss.
XX
OS Synthetic.
XX
FN WO2004058159-A2.
XX
PD 15-JUL-2004.
XX
PF 17-DEC-2003; 2003WO-US040417.
XX
PR 23-DEC-2002; 2002US-0436406P.
XX
PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.
XX
FI Fearon KL;
XX
DR WPI; 2004-561515/54.
XX
PT New branched immunomodulatory compound comprising at least three nucleic acid moieties and at least one branch-point nucleoside, useful for modulating an immune response in individual suffering e.g. allergy.
PT
PS Disclosure; SEQ ID NO 98; 183pp; English.

The present invention relates to novel branched immunomodulatory compounds (BIC) comprising at least three nucleic acid moieties, at least one of which comprises the nucleotide sequence 5'-CG-3', and at least one branch-point nucleoside. The BIC compounds has immunomodulatory activity e.g. the ability to stimulate interferon (IFN)-gamma production from human peripheral blood mononuclear cells, the ability to stimulate IFN-alpha production from human peripheral blood mononuclear cells and the ability to stimulate B cell proliferation. The BIC compounds are useful for modulating an immune response in an individual suffering from a disorder associated with a T helper (Th)2-type immune response e.g. allergy, allergy-induced asthma or an infectious disease; for increasing secretion of IFN-gamma by blood cells in an individual. The BIC compounds are also useful for immunomodulation of cells and individuals; in the fields of biomedicine and immunology; for the manufacture of a medicament; for treating idiopathic pulmonary fibrosis, viral infection (e.g. hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for ameliorating an Igs-related disorder in an individual. The disorders includes atopic dermatitis, eosinophilic gastrointestinal inflammation, eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis; cancer; infectious disease resistant to humoral immune responses (e.g. diseases caused by mycobacterial infections and intracellular pathogens, cellular pathogens e.g. bacteria or protozoans or by subcellular

CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M.ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; AIDS and herpes zoster); for
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammation
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.

XX Sequence 14 BP; 2 A; 4 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 12; Length 14;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 |||||
 Db 5 CGAACGTTTCG 14

RESULT 66
 ADQ95356/c
 ID ADQ95356 standard; DNA; 14 BP.

XX AC ADQ95356;

XX DT 07-OCT-2004 (first entry)

XX DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 98.

XX KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; Branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.

XX OS Synthetic.

XX PN WO2004058159-A2.

XX PD 15-JUL-2004.

XX PF 17-DEC-2003; 2003WO-US040417.

XX PR 23-DEC-2002; 2002US-0436406P.

XX PA (DYNA-) DYNAXX TECHNOLOGIES CORP.

XX PI Fearon KL;

XX DR WPI; 2004-561515/54.

XX PT New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.

XX PS Disclosure; SEQ ID NO 98; 183pp; English.

XX CC The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the

CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an Igs-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M.ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.

XX SQ Sequence 14 BP; 2 A; 4 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 12; Length 14;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 |||||
 Db 14 CGAACGTTTCG 5

RESULT 67

ADQ95390

ID ADQ95390 standard; DNA; 14 BP.

XX AC ADQ95390;

XX DT 07-OCT-2004 (first entry)

XX DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 132.

XX KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; Branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.

XX OS Synthetic.

XX FH Key Location/Qualifiers
 FT modified_base 5 /*tag= a

FT /mod_base= OTHER

FT /note= "c= 5-bromocytosine"

FT modified_base 9 /*tag= b

FT /mod_base= OTHER

FT /note= "c= 5-bromocytosine"

XX PN WO2004058159-A2.

XX PD 15-JUL-2004.

XX PF 17-DEC-2003; 2003WO-US040417.

XX PR 23-DEC-2002; 2002US-0436406P.

XX PA (DYNA-) DYNAXX TECHNOLOGIES CORP.

XX PI Fearon KL;

XX DR WPI; 2004-561515/54.

XX

PT New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.
 XX
 PS Disclosure; SEQ ID NO 132; 183pp; English.

XX The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an Igg-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marimum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.

XX SQ Sequence 14 BP; 2 A; 4 C; 4 G; 3 T; 1 U; 0 Other;

Query Match 100.0%; Score 10; DB 12; Length 14;
 Best Local Similarity 90.0%; Pred. No. 4.7e+03;
 Matches 9; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

Db 5 CGAACGTTTCG 14

RESULT 68
 ADQ95390/c
 ID ADQ95390 standard; DNA; 14 BP.

AC ADQ95390;

XX 07-OCT-2004 (first entry)

XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 132.

XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 XX Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Anticancer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.

OS Synthetic.

XX Key Location/Qualifiers

FT modified_base 5

FT /*tag= a

FT /mod_base= OTHER

FT /note= "C= 5-bromocytosine"

FT modified_base 9
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "C= 5-bromocytosine"

XX WO2004058159-A2.

PN 15-JUL-2004.

PD 17-DEC-2003; 2003WO-US040417.

PF 23-DEC-2002; 2002US-0436406P.

PR (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX Fearon KL;

XX WPI; 2004-561515/54.

XX New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.

PS Disclosure; SEQ ID NO 132; 183pp; English.

XX The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an Igg-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marimum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.

XX SQ Sequence 14 BP; 2 A; 4 C; 4 G; 3 T; 1 U; 0 Other;

Query Match 100.0%; Score 10; DB 12; Length 14;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

Db 14 CGAACGTTTCG 5

RESULT 69

ADQ95394

ID ADQ95394 standard; DNA; 14 BP.

XX

AC ADQ95394;

XX

DT XX 07-OCT-2004 (first entry)

DE XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 136.

XX XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;

KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;

KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;

KW Tuberculostatic; Antileptotic; Antiparasitic; Antimalarial; Antiulcer;

KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;

KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;

KW IFN-alpha; ss.

XX OS Synthetic.

XX XX Key Location/Qualifiers

PH modified_base 1

FT /*tag= a

FT /mod_base= OTHER

FT /note= "5'-T is attached to the 3' position of a branch

FT point adenosine, rA, which is further attached to two

FT oligonucleotides, SEQ ID 135 at the 5' position of rA,

FT and SEQ ID 137 at the 2' position of rA"

XX XX WO2004058159-A2.

XX XX 15-JUL-2004.

XX PF 17-DEC-2003; 2003WO-US040417.

XX PR 23-DEC-2002; 2002US-0436406P.

XX PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX FI Fearon KL;

XX DR WPI; 2004-561515/54.

XX PT New branched immunomodulatory compound comprising at least three nucleic

PT acid moieties and at least one branch-point nucleoside, useful for

PT modulating an immune response in individual suffering e.g. allergy.

XX PS Example 5; SEQ ID NO 136; 183pp; English.

XX XX The present invention relates to novel branched immunomodulatory

CC compounds (BIC) comprising at least three nucleic acid moieties, at least

CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one

CC branch-point nucleoside. The BIC compounds has immunomodulatory activity

CC e.g. the ability to stimulate interferon (IFN)-gamma production from

CC human peripheral blood mononuclear cells, the ability to stimulate IFN-

CC alpha production from human peripheral blood mononuclear cells and the

CC ability to stimulate B cell proliferation. The BIC compounds are useful

CC for modulating an immune response in an individual suffering from a

CC disorder associated with a T helper (Th)2-type immune response e.g.

CC allergy, allergy-induced asthma or an infectious disease; for increasing

CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds

CC are also useful for immunomodulation of cells and individuals; in the

CC fields of biomedicine and immunology; for the manufacture of a medicament

CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.

CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for

CC ameliorating an IGE-related disorder in an individual. The disorders

CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,

CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;

CC cancer; infectious disease resistant to humoral immune responses (e.g.

CC diseases caused by mycobacterial infections and intracellular pathogens,

CC cellular pathogens e.g. bacteria or protozoans or by subcellular

CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,

CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases

CC caused by intracellular parasites such as malaria; leishmaniasis, diseases

CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory

CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation

CC induced fibrosis, hepatic colitis; including schistosomiasis-induced

CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in

CC the BIC compounds of the invention.

XX SQ Sequence 14 BP; 3 A; 3 C; 3 G; 5 T; 0 U; 0 Other;

XX Query Match 100.0%; Score 10; DB 12; Length 14;

XX Best Local Similarity 100.0%; Pred. No. 4.7e+03;

XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10

Db 4 CGAACGTTTCG 13

XX RESULT 70

ADQ95394/c

ID ADQ95394 standard; DNA; 14 BP.

XX AC ADQ95394;

XX DT 07-OCT-2004 (first entry)

XX DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 136.

XX XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;

KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;

KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;

KW Tuberculostatic; Antileptotic; Antiparasitic; Antimalarial; Antiulcer;

KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;

KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;

KW IFN-alpha; ss.

XX OS Synthetic.

XX XX Key Location/Qualifiers

PH modified_base 1

FT /*tag= a

FT /mod_base= OTHER

FT /note= "5'-T is attached to the 3' position of a branch

FT point adenosine, rA, which is further attached to two

FT oligonucleotides, SEQ ID 135 at the 5' position of rA,

FT and SEQ ID 137 at the 2' position of rA"

XX XX WO2004058159-A2.

XX XX 15-JUL-2004.

XX PF 17-DEC-2003; 2003WO-US040417.

XX PR 23-DEC-2002; 2002US-0436406P.

XX PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX FI Fearon KL;

XX DR WPI; 2004-561515/54.

XX PT New branched immunomodulatory compound comprising at least three nucleic

PT acid moieties and at least one branch-point nucleoside, useful for

PT modulating an immune response in individual suffering e.g. allergy.

XX PS Example 5; SEQ ID NO 136; 183pp; English.

XX XX The present invention relates to novel branched immunomodulatory

CC compounds (BIC) comprising at least three nucleic acid moieties, at least

CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one

CC branch-point nucleoside. The BIC compounds has immunomodulatory activity

CC e.g. the ability to stimulate interferon (IFN)-gamma production from

CC human peripheral blood mononuclear cells, the ability to stimulate IFN-

CC alpha production from human peripheral blood mononuclear cells and the

CC ability to stimulate B cell proliferation. The BIC compounds are useful

CC for modulating an immune response in an individual suffering from a

CC disorder associated with a T helper (Th)2-type immune response e.g.

CC allergy, allergy-induced asthma or an infectious disease; for increasing

CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds

CC are also useful for immunomodulation of cells and individuals; in the

CC fields of biomedicine and immunology; for the manufacture of a medicament

CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.

CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for

CC ameliorating an IGE-related disorder in an individual. The disorders

CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,

CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;

CC cancer; infectious disease resistant to humoral immune responses (e.g.

CC diseases caused by mycobacterial infections and intracellular pathogens,

CC cellular pathogens e.g. bacteria or protozoans or by subcellular

CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,

CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases

CC caused by intracellular parasites such as malaria; leishmaniasis, diseases

CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory

CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation

CC induced fibrosis, hepatic colitis; including schistosomiasis-induced

CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in

CC the BIC compounds of the invention.

CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an Igg-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marimum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.

XX SQ Sequence 14 BP; 3 A; 3 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 12; Length 14;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAAGCTTCG 10
 Db 13 CGAAGCTTCG 4

RESULT 71

ADQ95395
 ID ADQ95395 standard; DNA; 14 BP.

XX AC ADQ95395;

XX DT 07-OCT-2004 (first entry)

XX DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 137.

XX KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.

XX OS Synthetic.

XX FH Key Location/Qualifiers
 FT modified_base 14

FT /*tag= a

FT /mod_base= OTHER
 FT /note= "T-3' is attached to the 2' position of a branch
 FT point adenosine, rA, which is further attached to two
 FT oligonucleotides, SEQ ID 135 at the 5' position of rA and
 FT SEQ ID 136 at the 3' position of rA"

XX FN WO2004058159-A2.

XX PD 15-JUL-2004.

XX PF 17-DEC-2003; 2003WO-US040417.

XX PR 23-DEC-2002; 2002US-0436406P.

XX PA (DYNA-) DYNVAX TECHNOLOGIES CORP.

XX PI Fearon KL;

XX DR WPI; 2004-561515/54.

XX

PT New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.

PS Example 5; SEQ ID NO 137; 183pp; English.

XX The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an Igg-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marimum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.

XX SQ Sequence 14 BP; 4 A; 3 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 12; Length 14;

Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAAGCTTCG 10

Db 2 CGAAGCTTCG 11

RESULT 72

ADQ95395/c

ID ADQ95395 standard; DNA; 14 BP.

XX AC ADQ95395;

XX DT 07-OCT-2004 (first entry)

XX DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 137.

XX KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.

XX OS Synthetic.

XX FH Key Location/Qualifiers

FT modified_base 14

FT /*tag= a

FT /mod_base= OTHER

FT /note= "T-3' is attached to the 2' position of a branch

point adenosine, rA, which is further attached to two oligonucleotides, SEQ ID 135 at the 5' position of rA and SEQ ID 136 at the 3' position of rA"

FT point adenosine, rA, which is further attached to two
FT oligonucleotides, SEQ ID 135 at the 5' position of rA and
FT SEQ ID 136 at the 3' position of rA"
XX
PN WO2004058159-A2.
XX
PD 15-JUL-2004.
XX
PP 17-DEC-2003; 2003WO-US040417.
XX
PR 23-DEC-2002; 2002US-0436406P.
XX
PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.
XX
PI Fearon KL;
XX
DR WPI; 2004-561515/54.
XX
XX New branched immunomodulatory compound comprising at least three nucleic
PT acid moieties and at least one branch-point nucleoside, useful for
PT modulating an immune response in individual suffering e.g. allergy.
XX
PS Example 5; SEQ ID NO 137; 183pp; English.
XX
XX The present invention relates to novel branched immunomodulatory
CC compounds (BIC) comprising at least three nucleic acid moieties, at least
CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
CC e.g. the ability to stimulate interferon (IFN)-gamma production from
CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
CC alpha production from human peripheral blood mononuclear cells and the
CC ability to stimulate B cell proliferation. The BIC compounds are useful
CC for modulating an immune response in an individual suffering from a
CC disorder associated with a T helper (Th)2-type immune response e.g.
CC allergy, allergy-induced asthma or an infectious disease; for increasing
CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
CC are also useful for immunomodulation of cells and individuals; in the
CC fields of biomedicine and immunology; for the manufacture of a medicament
CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
CC ameliorating an Ige-related disorder in an individual. The disorders
CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
CC cancer; infectious disease resistant to humoral immune responses (e.g.
CC diseases caused by mycobacterial infections and intracellular pathogens,
CC cellular pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
CC caused by intracellular parasites such as malaria; leishmaniasis,
CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
CC the BIC compounds of the invention.
XX
SQ Sequence 14 BP; 4 A; 3 C; 3 G; 4 T; 0 U; 0 Other;
Query Match 100.0%; Score 10; DB 12; Length 14;
Best Local Similarity 100.0%; Pred. No. 4.7e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
|||||
Db 11 CGAACGTTTCG 2
RESULT 73
ADQ95362
ID ADQ95362 standard; DNA; 14 BP.
XX
AC ADQ95362;
XX
DT 07-OCT-2004 (first entry)

XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 104.
DE
XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
KW Viricide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
KW Tuberculosis; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
IFN-alpha; ss.
XX
XX Synthetic.
XX WO2004058159-A2.
XX
XX 15-JUL-2004.
XX
XX 17-DEC-2003; 2003WO-US040417.
XX
XX 23-DEC-2002; 2002US-0436406P.
XX
XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
PA
XX
XX Fearon KL;
PI
XX WPI; 2004-561515/54.
DR
XX New branched immunomodulatory compound comprising at least three nucleic
PT acid moieties and at least one branch-point nucleoside, useful for
PT modulating an immune response in individual suffering e.g. allergy.
XX
XX Disclosure; SEQ ID NO 104; 183pp; English.
XX
XX The present invention relates to novel branched immunomodulatory
CC compounds (BIC) comprising at least three nucleic acid moieties, at least
CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
CC e.g. the ability to stimulate interferon (IFN)-gamma production from
CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
CC alpha production from human peripheral blood mononuclear cells and the
CC ability to stimulate B cell proliferation. The BIC compounds are useful
CC for modulating an immune response in an individual suffering from a
CC disorder associated with a T helper (Th)2-type immune response e.g.
CC allergy, allergy-induced asthma or an infectious disease; for increasing
CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
CC are also useful for immunomodulation of cells and individuals; in the
CC fields of biomedicine and immunology; for the manufacture of a medicament
CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
CC ameliorating an Ige-related disorder in an individual. The disorders
CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
CC cancer; infectious disease resistant to humoral immune responses (e.g.
CC diseases caused by mycobacterial infections and intracellular pathogens,
CC cellular pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
CC caused by intracellular parasites such as malaria; leishmaniasis,
CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
CC the BIC compounds of the invention.
XX
SQ Sequence 14 BP; 2 A; 4 C; 4 G; 4 T; 0 U; 0 Other;
Query Match 100.0%; Score 10; DB 12; Length 14;
Best Local Similarity 100.0%; Pred. No. 4.7e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
|||||
Db 5 CGAACGTTTCG 14

as therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a mycobacterial epitope or a tumour associated epitope) or prophylactic vaccines. The IMP's can also be used for the treatment of e.g. food allergies, rhinitis, atopic dermatitis, conjunctivitis, urticaria, shock, Hymenoptera sting allergies and drug allergies and parasitic infections; viral disease e.g. Hepatitis B, Hepatitis C, influenza, Acquired immunodeficiency syndrome (AIDS) and Herpes zoster; and cancer; inflammatory disorder e.g. ulcerative colitis; fibrotic disorder e.g. idiopathic pulmonary fibrosis, scleroderma, cutaneous radiation-induced fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic fibrosis, renal fibrosis. The IMP's may also be used to create a prophylactic vaccine to increase resistance to infection by bacterial or viral pathogens. The immunomodulatory polynucleotide modulates an immune response; or increases interferon-gamma; or interferon-alpha; effectively stimulates cytokines including type I interferons e.g. IFN-alpha and IFN-omega and IFN-gamma, production from human cells; effectively stimulates B cells to proliferate; and activates plasmacytoid dendritic cells to undergo maturation which can result in retardation of plasmacytoid dendritic cell apoptosis in culture. This polynucleotide sequence represents an immunomodulatory polynucleotide of the invention.

XX SQ Sequence 14 BP; 2 A; 4 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 13; Length 14;
Best Local Similarity 100.0%; Pred. No. 4.7e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 5 CGAACGTTTCG 14
|||||

RESULT 76

ADQ16877/c
ID ADQ16877 standard; DNA; 14 BP.

AC ADQ16877;

XX 07-OCT-2004 (first entry)

XX DE Immunomodulatory polynucleotide, SEQ ID No 167.

XX Immunomodulatory polynucleotide; IMP; palindromic sequence; dinucleotide;
XX trinucleotide; antimicrobial; anti-allergic; antiasthmatic;
XX dermatological; antiinflammatory; ophthalmological; immunosuppressive;
XX antibacterial; vasotropic; antiparasitic; virucide; hepatotropic;
XX anti-HIV; cytostatic; antiulcer; nephrotropic; IGE-related disorder;
XX T helper; (TH)2-type immune response; vaccine; prophylactic; immune;
XX interferon-gamma; interferon-alpha; type I interferon; IFN-alpha;
XX IFN-omega; IFN-gamma; plasmacytoid dendritic cell; ss.

XX OS Unidentified.

XX WO2004058179-A2.

XX 15-JUL-2004.

XX 18-DEC-2003; 2003WO-US041001.

XX 23-DEC-2002; 2002US-0436122P.

XX 13-FEB-2003; 2003US-0447885P.

XX 01-MAY-2003; 2003US-0467546P.

XX (DYNA-) DYNNAVX TECHNOLOGIES.

XX Dina D, Fearon KL, Marshall J;

XX WPT; 2004-525782/50.

XX Immunomodulatory polynucleotide useful for the treatment of e.g. atopic
XX dermatitis comprises palindromic sequence comprising at least eight bases
XX in length, which contains at least two dinucleotides and at least one
XX trinucleotide.

XX PS

XX Example 1; SEQ ID NO 167; 119pp; English.

XX The invention relates to a novel immunomodulatory polynucleotide (IMP) comprising a palindromic sequence. The palindromic sequence comprises at least 8 bases in length, which contains at least two dinucleotides (CG), and at least one trinucleotide (TCG) at or near the 5' end of the polynucleotide. The CG dinucleotides are separated by 0 - 5 bases. The 5' T of the (TCG) is positioned 0 - 3 bases from the 5' end of the polynucleotide. The (TCG) is separated from the 5' end of the palindromic sequence by 0 - 2 bases. The palindromic sequence includes all or part of the (TCG) sequence, where y = 1 or 2. The immunomodulatory polynucleotides have the following activities: antimicrobial, anti-allergic, antiasthmatic, dermatological, antiinflammatory, ophthalmological, immunosuppressive, antibacterial, vasotropic, antiparasitic, virucide, hepatotropic, anti-HIV, cytostatic, antiulcer, and nephrotropic. The immunomodulatory polynucleotides can be used for ameliorating a symptom of an infectious disease and IGE-related disorder. The IMP's may also be used for the treatment of a disorder associated with a T helper (TH)2-type immune response (e.g. allergies, allergic-induced asthma or atopic dermatitis), individuals receiving vaccines such as therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a mycobacterial epitope or a tumour associated epitope) or prophylactic vaccines. The IMP's can also be used for the treatment of e.g. food allergies, rhinitis, atopic dermatitis, conjunctivitis, urticaria, shock, Hymenoptera sting allergies and drug allergies and parasitic infections; viral disease e.g. Hepatitis B, Hepatitis C, influenza, Acquired immunodeficiency syndrome (AIDS) and Herpes zoster; and cancer; inflammatory disorder e.g. ulcerative colitis; fibrotic disorder e.g. idiopathic pulmonary fibrosis, scleroderma, cutaneous radiation-induced fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic fibrosis, renal fibrosis. The IMP's may also be used to create a prophylactic vaccine to increase resistance to infection by bacterial or viral pathogens. The immunomodulatory polynucleotide modulates an immune response; or increases interferon-gamma; or interferon-alpha; effectively stimulates cytokines including type I interferons e.g. IFN-alpha and IFN-omega and IFN-gamma, production from human cells; effectively stimulates B cells to proliferate; and activates plasmacytoid dendritic cells to undergo maturation which can result in retardation of plasmacytoid dendritic cell apoptosis in culture. This polynucleotide sequence represents an immunomodulatory polynucleotide of the invention.

XX SQ Sequence 14 BP; 2 A; 4 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 13; Length 14;

Best Local Similarity 100.0%; Pred. No. 4.7e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

Db 14 CGAACGTTTCG 5
|||||

RESULT 77

ADQ16819

ID ADQ16819 standard; DNA; 14 BP.

XX ADQ16819;

XX 07-OCT-2004 (first entry)

XX Immunomodulatory polynucleotide, SEQ ID No 98.

XX Immunomodulatory polynucleotide; IMP; palindromic sequence; dinucleotide;
XX trinucleotide; antimicrobial; anti-allergic; antiasthmatic;
XX dermatological; antiinflammatory; ophthalmological; immunosuppressive;
XX antibacterial; vasotropic; antiparasitic; virucide; hepatotropic;
XX anti-HIV; cytostatic; antiulcer; nephrotropic; IGE-related disorder;
XX T helper; (TH)2-type immune response; vaccine; prophylactic; immune;
XX interferon-gamma; interferon-alpha; type I interferon; IFN-alpha;
XX IFN-omega; IFN-gamma; plasmacytoid dendritic cell; ss.

XX OS Unidentified.

XX FN WO2004058179-A2.
 XX PD 15-JUL-2004.
 XX PF 18-DEC-2003; 2003WO-US041001.
 XX PR 23-DEC-2002; 2002US-0436122P.
 XX PR 13-FEB-2003; 2003US-0447885P.
 XX PR 01-MAY-2003; 2003US-0467546P.
 XX PA (DYNA-) DYNAVAX TECHNOLOGIES.
 XX FI Dina D, Fearon KL, Marshall J;
 XX DR WPI; 2004-525782/50.
 XX PT Immunomodulatory polynucleotide useful for the treatment of e.g. atopic
 PT dermatitis comprising palindromic sequence comprising at least eight bases
 PT in length, which contains at least two dinucleotides and at least one
 PT trinucleotide.
 XX OS Example 1; SEQ ID NO 98; 119pp; English.
 XX PS The invention relates to a novel immunomodulatory polynucleotide (IMP)
 CC comprising a palindromic sequence. The palindromic sequence comprises at
 CC least 8 bases in length, which contains at least two dinucleotides (CG),
 CC and at least one trinucleotide (TCG) at or near the 5' end of the
 CC polynucleotide. The CG dinucleotides are separated by 0 - 5 bases. The 5'
 CC T of the (TCG) is positioned 0 - 3 bases from the 5' end of the
 CC polynucleotide. The (TCG) is separated from the 5' end of the
 CC palindromic sequence by 0 - 2 bases. The palindromic sequence includes
 CC all or part of the (TCG) sequence, where Y = 1 or 2. The immunomodulatory
 CC polynucleotides have the following activities: antimicrobial,
 CC antiallergic, antiasthmatic, dermatological, antiinflammatory,
 CC ophthalmological, immunosuppressive, antibacterial, vasotropic,
 CC antiparasitic, virucide, hepatotropic, anti-HIV, cytostatic, antitumor,
 CC and nephrotropic. The immunomodulatory polynucleotides can be used for
 CC ameliorating a symptom of an infectious disease and IgE-related disorder.
 CC The IMP's may also be used for the treatment of a disorder associated
 CC with a T helper (TH)2-type immune response (e.g. allergies, allergy-
 CC induced asthma or atopic dermatitis), individuals receiving vaccines such
 CC as therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a
 CC mycobacterial epitope or a tumour associated epitope) or prophylactic
 CC vaccines. The IMP's can also be used for the treatment of e.g. food
 CC allergies, rhinitis, atopic dermatitis, conjunctivitis, urticaria, shock,
 CC Hymenoptera sting allergies and drug allergies and parasitic infections;
 CC viral disease e.g. Hepatitis B, Hepatitis C, Influenza, Acquired
 CC immunodeficiency syndrome (AIDS) and Herpes zoster; and cancer;
 CC idiopathic pulmonary fibrosis, scleroderma, cutaneous radiation-induced
 CC fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic
 CC fibrosis, renal fibrosis. The IMP's may also be used to create a
 CC prophylactic vaccine to increase resistance to infection by bacterial or
 CC viral pathogens. The immunomodulatory polynucleotide modulates an immune
 CC response; or increases interferon-gamma; or interferon-alpha; effectively
 CC stimulates cytokines including type I interferons e.g. IFN-alpha and IFN-
 CC omega and IFN-gamma, production from human cells; effectively stimulates
 CC B cells to proliferate; and activates plasmacytoid dendritic cells to
 CC undergo maturation which can result in retardation of plasmacytoid
 CC dendritic cell apoptosis in culture. This polynucleotide sequence
 CC represents an immunomodulatory polynucleotide of the invention.
 XX SQ Sequence 14 BP; 4 A; 3 C; 3 G; 4 T; 0 U; 0 Other;
 Query Match 100.0%; Score 10; DB 13; Length 14;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 CGAAGTTCG 10
 |||||
 Db 3 CGAAGTTCG 12

RESULT 78
 ADQ16819/c
 ID ADQ16819 standard; DNA; 14 BP.
 XX AC ADQ16819;
 XX DT 07-OCT-2004 (first entry)
 XX DE Immunomodulatory polynucleotide, SEQ ID NO 98.
 XX KW Immunomodulatory polynucleotide; IMP; palindromic sequence; dinucleotide;
 KW trinucleotide; antimicrobial; antiallergic; antiasthmatic;
 KW dermatological; antiinflammatory; ophthalmological; immunosuppressive;
 KW antibacterial; vasotropic; antiparasitic; virucide; hepatotropic;
 KW anti-HIV; cytostatic; antitumor; nephrotropic; IgE-related disorder;
 KW T helper; (TH)2-type immune response; vaccine; prophylactic; immune;
 KW interferon-gamma; interferon-alpha; type I interferon; IFN-alpha;
 KW IFN-omega; IFN-gamma; plasmacytoid dendritic cell; ss.
 XX OS Unidentified.
 XX PN WO2004058179-A2.
 XX PD 15-JUL-2004.
 XX PF 18-DEC-2003; 2003WO-US041001.
 XX PR 23-DEC-2002; 2002US-0436122P.
 XX PR 13-FEB-2003; 2003US-0447885P.
 XX PR 01-MAY-2003; 2003US-0467546P.
 XX PA (DYNA-) DYNAVAX TECHNOLOGIES.
 XX PI Dina D, Fearon KL, Marshall J;
 XX DR WPI; 2004-525782/50.
 XX PT Immunomodulatory polynucleotide useful for the treatment of e.g. atopic
 PT dermatitis comprising palindromic sequence comprising at least eight bases
 PT in length, which contains at least two dinucleotides and at least one
 PT trinucleotide.
 XX OS Example 1; SEQ ID NO 98; 119pp; English.
 XX PS The invention relates to a novel immunomodulatory polynucleotide (IMP)
 CC comprising a palindromic sequence. The palindromic sequence comprises at
 CC least 8 bases in length, which contains at least two dinucleotides (CG),
 CC and at least one trinucleotide (TCG) at or near the 5' end of the
 CC polynucleotide. The CG dinucleotides are separated by 0 - 5 bases. The 5'
 CC T of the (TCG) is positioned 0 - 3 bases from the 5' end of the
 CC polynucleotide. The (TCG) is separated from the 5' end of the
 CC palindromic sequence by 0 - 2 bases. The palindromic sequence includes
 CC all or part of the (TCG) sequence, where Y = 1 or 2. The immunomodulatory
 CC polynucleotides have the following activities: antimicrobial,
 CC antiallergic, antiasthmatic, dermatological, antiinflammatory,
 CC ophthalmological, immunosuppressive, antibacterial, vasotropic,
 CC antiparasitic, virucide, hepatotropic, anti-HIV, cytostatic, antitumor,
 CC and nephrotropic. The immunomodulatory polynucleotides can be used for
 CC ameliorating a symptom of an infectious disease and IgE-related disorder.
 CC The IMP's may also be used for the treatment of a disorder associated
 CC with a T helper (TH)2-type immune response (e.g. allergies, allergy-
 CC induced asthma or atopic dermatitis), individuals receiving vaccines such
 CC as therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a
 CC mycobacterial epitope or a tumour associated epitope) or prophylactic
 CC vaccines. The IMP's can also be used for the treatment of e.g. food
 CC allergies, rhinitis, atopic dermatitis, conjunctivitis, urticaria, shock,
 CC Hymenoptera sting allergies and drug allergies and parasitic infections;
 CC viral disease e.g. Hepatitis B, Hepatitis C, Influenza, Acquired
 CC immunodeficiency syndrome (AIDS) and Herpes zoster; and cancer;
 CC idiopathic pulmonary fibrosis, scleroderma, cutaneous radiation-induced
 CC fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic

CC fibrosis, renal fibrosis. The IMP's may also be used to create a
 CC prophylactic vaccine to increase resistance to infection by bacterial
 CC viral pathogens. The immunomodulatory polynucleotide modulates an immune
 CC response; or increases interferon-gamma, or interferon-alpha; effectively
 CC stimulates cytokines including type I interferons e.g. IFN-alpha and IFN-
 CC omega and IFN-gamma, production from human cells; effectively stimulates
 CC B cells to proliferate; and activates plasmacytoid dendritic cells to
 CC undergo maturation which can result in retardation of plasmacytoid
 CC dendritic cell apoptosis in culture. This polynucleotide sequence
 CC represents an immunomodulatory polynucleotide of the invention.

XX Sequence 14 BP; 4 A; 3 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 13; Length 14;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 |||||
 Db 12 CGAACGTTTCG 3

RESULT 79

ADQ16822
 ID ADQ16822 standard; DNA; 15 BP.

XX AC ADQ16822;

XX 07-OCT-2004 (first entry)

XX Immunomodulatory polynucleotide, SEQ ID No 101.

KW Immunomodulatory polynucleotide; IMP; palindromic sequence; dinucleotide;
 KW trinucleotide; antimicrobial; anti-allergic; antiasthmatic;
 KW dermatological; antiinflammatory; ophthalmological; immunosuppressive;
 KW antibacterial; vasotrophic; antiparasitic; virucide; hepatotropic;
 KW anti-HIV; cytostatic; antiulcer; nephrotropic; IGE-related disorder;
 KW T helper; (TH)2-type immune response; vaccine; prophylactic; immune;
 KW interferon-gamma; interferon-alpha; type I interferon; IFN-alpha;
 KW IFN-omega; IFN-gamma; plasmacytoid dendritic cell; ss.

XX Unidentified.

XX WO2004058179-A2.

XX 15-JUL-2004.

XX 18-DEC-2003; 2003WO-US041001.

XX 23-DEC-2002; 2002US-0436122P.

XX 13-FEB-2003; 2003US-0447885P.

XX 01-MAY-2003; 2003US-0467546P.

XX (DYNA-) DYNAVAX TECHNOLOGIES.

XX Dina D, Fearon KL, Marshall J;

XX WPI; 2004-525782/50.

XX Immunomodulatory polynucleotide useful for the treatment of e.g. atopic
 PT dermatitis comprises palindromic sequence comprising at least eight bases
 PT in length, which contains at least two dinucleotides and at least one
 PT trinucleotide.

XX Example 1; SEQ ID NO 101; 119pp; English.

XX The invention relates to a novel immunomodulatory polynucleotide (IMP)
 CC comprising a palindromic sequence. The palindromic sequence comprises at
 CC least 8 bases in length, which contains at least two dinucleotides (CG),
 CC and at least one trinucleotide (TCG) at or near the 5' end of the
 CC polynucleotide. The CG dinucleotides are separated by 0 - 5 bases. The 5'
 CC T of the (TCG) is positioned 0 - 3 bases from the 5' end of the
 CC polynucleotide. The (TCG) is separated from the 5' end of the

CC palindromic sequence by 0 - 2 bases. The palindromic sequence includes
 CC all or part of the (TCG) sequence, where y= 1 or 2. The immunomodulatory
 CC polynucleotides have the following activities: antimicrobial,
 CC anti-allergic, antiasthmatic, dermatological, antiinflammatory,
 CC ophthalmological, immunosuppressive, antibacterial, vasotrophic,
 CC antiparasitic, virucide, hepatotropic, anti-HIV, cytostatic, antiulcer,
 CC and nephrotropic. The immunomodulatory polynucleotides can be used for
 CC ameliorating a symptom of an infectious disease and IGE-related disorder.
 CC The IMP's may also be used for the treatment of a disorder associated
 CC with a T helper (TH)2-type immune response (e.g. allergies, allergy-
 CC induced asthma or atopic dermatitis), individuals receiving vaccines such
 CC as therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a
 CC mycobacterial epitope or a tumour associated epitope) or prophylactic
 CC vaccines. The IMP's can also be used for the treatment of e.g. food
 CC allergies, rhinitis, atopic dermatitis, conjunctivitis, urticaria, shock,
 CC Hymenoptera sting allergies and drug allergies and parasitic infections;
 CC viral disease e.g. Hepatitis B, Hepatitis C, influenza, Acquired
 CC immunodeficiency syndrome (AIDS) and Herpes zoster; and cancer;
 CC inflammatory disorder e.g. ulcerative colitis; fibrotic disorder e.g.
 CC idiopathic pulmonary fibrosis, scleroderma, cutaneous radiation-induced
 CC fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic
 CC fibrosis, renal fibrosis. The IMP's may also be used to create a
 CC prophylactic vaccine to increase resistance to infection by bacterial or
 CC viral pathogens. The immunomodulatory polynucleotide modulates an immune
 CC response; or increases interferon-gamma; or interferon-alpha; effectively
 CC stimulates cytokines including type I interferons e.g. IFN-alpha and IFN-
 CC omega and IFN-gamma, production from human cells; effectively stimulates
 CC B cells to proliferate; and activates plasmacytoid dendritic cells to
 CC undergo maturation which can result in retardation of plasmacytoid
 CC dendritic cell apoptosis in culture. This polynucleotide sequence
 CC represents an immunomodulatory polynucleotide of the invention.

XX Sequence 15 BP; 3 A; 4 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 13; Length 15;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 |||||
 Db 5 CGAACGTTTCG 14

RESULT 80

ADQ16822/c
 ID ADQ16822 standard; DNA; 15 BP.

XX AC ADQ16822;

XX 07-OCT-2004 (first entry)

XX Immunomodulatory polynucleotide, SEQ ID No 101.

KW Immunomodulatory polynucleotide; IMP; palindromic sequence; dinucleotide;
 KW trinucleotide; antimicrobial; anti-allergic; antiasthmatic;
 KW dermatological; antiinflammatory; ophthalmological; immunosuppressive;
 KW antibacterial; vasotrophic; antiparasitic; virucide; hepatotropic;
 KW anti-HIV; cytostatic; antiulcer; nephrotropic; IGE-related disorder;
 KW T helper; (TH)2-type immune response; vaccine; prophylactic; immune;
 KW interferon-gamma; interferon-alpha; type I interferon; IFN-alpha;
 KW IFN-omega; IFN-gamma; plasmacytoid dendritic cell; ss.

XX Unidentified.

XX WO2004058179-A2.

XX 15-JUL-2004.

XX 18-DEC-2003; 2003WO-US041001.

XX 23-DEC-2002; 2002US-0436122P.

XX 13-FEB-2003; 2003US-0447885P.

XX 01-MAY-2003; 2003US-0467546P.

XX PA (DYNA-) DYNAVAX TECHNOLOGIES.

XX PI Dina D, Fearon KL, Marshall J;

XX DR WPI; 2004-525782/50.

XX PT Immunomodulatory polynucleotide useful for the treatment of e.g. atopic
PT dermatitis comprises palindromic sequence comprising at least eight bases
PT in length, which contains at least two dinucleotides and at least one
PT trinucleotide.

XX PS Example 1; SEQ ID NO 101; 119pp; English.

XX CC The invention relates to a novel immunomodulatory polynucleotide (IMP)
CC comprising a palindromic sequence. The palindromic sequence comprises at
CC least 8 bases in length, which contains at least two dinucleotides (CG),
CC and at least one trinucleotide (TCG) at or near the 5' end of the
CC polynucleotide. The CG dinucleotides are separated by 0 - 5 bases. The 5'
CC T of the (TCG) is positioned 0 - 3 bases from the 5' end of the
CC palindromic sequence. The (TCG) is separated from the 5' end of the
CC all or part of the (TCG) sequence, where y = 1 or 2. The immunomodulatory
CC polynucleotides have the following activities: antimicrobial,
CC antiallergic, antiasthmatic, dermatological, antiinflammatory,
CC ophthalmological, immunosuppressive, antibacterial, vasotropic,
CC antiparasitic, virucide, hepatotropic, anti-HIV, cytostatic, antiulcer,
CC and nephrotropic. The immunomodulatory polynucleotides can be used for
CC ameliorating a symptom of an infectious disease and IgE-related disorder.
CC The IMP's may also be used for the treatment of a disorder associated
CC with a T helper (TH)2-type immune response (e.g. allergies, allergy-
CC induced asthma or atopic dermatitis), individuals receiving vaccines such
CC as therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a
CC mycobacterial epitope or a tumour associated epitope) or prophylactic
CC vaccines. The IMP's can also be used for the treatment of e.g. food
CC allergies, rhinitis, atopic dermatitis, conjunctivitis, urticaria, shock,
CC Hymenoptera sting allergies and drug allergies and parasitic infections;
CC viral disease e.g. Hepatitis B, Hepatitis C, Influenza, Acquired
CC immunodeficiency syndrome (AIDS) and Herpes zoster; and cancer;
CC inflammatory disorder e.g. ulcerative colitis; fibrotic disorder e.g.
CC idiopathic pulmonary fibrosis, scleroderma, cutaneous radiation-induced
CC fibrosis, renal fibrosis. The IMP's may also be used to create a
CC prophylactic vaccine to increase resistance to infection by bacterial or
CC viral pathogens. The immunomodulatory polynucleotide modulates an immune
CC response; or increases interferon-gamma; or interferon-alpha; effectively
CC stimulates cytokines including type I interferons e.g. IFN-alpha and IFN-
CC omega and IFN-gamma, production from human cells; effectively stimulates
CC B cells to proliferate; and activates plasmacytoid dendritic cells to
CC undergo maturation which can result in retardation of plasmacytoid
CC dendritic cell apoptosis in culture. This polynucleotide sequence
CC represents an immunomodulatory polynucleotide of the invention.

XX SQ Sequence 15 BP; 3 A; 4 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 13; Length 15;
Best Local Similarity 100.0%; Pred. No. 4.7e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
| | | | |
Db 14 CGAACGTTTCG 5

RESULT 81
ABQ75162
ID ABQ75162 standard; DNA; 16 BP.

XX AC ABQ75162;

XX DT 05-NOV-2002 (first entry)

XX DE ISS immunomodulatory oligonucleotide SEQ ID NO:11.

XX

KW Immunostimulatory sequence; ISS: immunomodulatory; immune response;
KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
KW immunoglobulin E; IgE-related disorder; antiallergic; antiasthmatic;
KW virucide; antibacterial; protozoacide; ss.

OS Synthetic.

XX WO200252002-A2.

XX PD 04-JUL-2002.

XX PF 27-DEC-2001; 2001WO-US050821.

XX PR 27-DEC-2000; 2000US-0258675P.

XX PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX PI Fearon KL, Dina D;

XX DR WPI; 2002-657426/70.

XX PT Immunomodulatory polynucleotide for modulating an immune response in a
PT subject suffering from disorders associated with Th2-type immune
PT response, e.g. allergy, or infectious disease, comprises an
PT immunostimulatory sequence.

XX PS Example 1; Page 20; 95pp; English.

XX CC The present invention describes an immunomodulatory polynucleotide (I)
CC comprising an immunostimulatory sequence (ISS). Also described: (1) an
CC immunomodulatory composition comprising (I); (2) an immunomodulatory
CC polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a
CC biodegradable MC, where the MC is less than 10 micrometre in size; and
CC (3) a kit comprising (I). (I) has anti-allergic, antiasthmatic, virucide,
CC antibacterial and protozoacide activities, and can be used as a modulator
CC of immune response. (I) is useful for modulating an immune response in an
CC individual suffering from disorders associated with a Th2-type immune
CC response, especially an allergy or asthma, or an infectious disease. (I)
CC is also useful for increasing interferon-gamma (IFN-gamma) in an
CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
CC individual having a viral infection. (I) is further useful for
CC ameliorating a symptom of an infectious disease caused by a cellular
CC pathogen such as mycobacterial disease, malaria, leishmaniasis,
CC toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a
CC symptom of an immunoglobulin E (IgE)-related disorder, preferably an
CC allergy-related disorder, in particular asthma in an individual. The
CC present sequence represents an immunomodulatory oligonucleotide from the
CC present invention

XX SQ Sequence 16 BP; 2 A; 4 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 6; Length 16;
Best Local Similarity 100.0%; Pred. No. 4.7e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
| | | | |
Db 5 CGAACGTTTCG 14

RESULT 82
ABQ75162/c
ID ABQ75162 standard; DNA; 16 BP.

XX AC ABQ75162;

XX DT 05-NOV-2002 (first entry)

XX DE ISS immunomodulatory oligonucleotide SEQ ID NO:11.

KW Immunostimulatory sequence; ISS: immunomodulatory; immune response;
 KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
 KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
 KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
 KW immunoglobulin E; IgE-related disorder; antiallergic; antiasthmatic;
 KW virucide; antibacterial; protozoacide; ss.
 XX
 OS Synthetic.
 XX
 XX WO200252002-A2.
 XX
 XX 04-JUL-2002.
 XX
 XX 27-DEC-2001; 2001WO-US050821.
 XX
 XX 27-DEC-2000; 2000US-0258675P.
 XX
 XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 XX
 XX Fearon KL, Dina D;
 XX
 XX WPI; 2002-657426/70.
 XX
 XX Immunomodulatory polynucleotide for modulating an immune response in a
 PT subject suffering from disorders associated with Th2-type immune
 PT response, e.g. allergy, or infectious disease, comprises an
 PT immunostimulatory sequence.
 XX

Example 1; Page 20; 95pp; English.

XX The present invention describes an immunomodulatory polynucleotide (I)
 CC comprising an immunostimulatory sequence (ISS). Also described: (1) an
 CC immunomodulatory composition comprising (I); (2) an immunomodulatory
 CC polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a
 CC biodegradable MC, where the MC is less than 10 micrometre in size; and
 CC (3) a kit comprising (I). (I) has antiallergic, antiasthmatic, virucide,
 CC antibacterial and protozoacide activities, and can be used as a modulator
 CC of immune response. (I) is useful for modulating an immune response in an
 CC individual suffering from disorders associated with a Th2-type immune
 CC response, especially an allergy or asthma, or an infectious disease. (I)
 CC is also useful for increasing interferon-gamma (IFN-gamma) in an
 CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
 CC individual having a viral infection. (I) is further useful for
 CC ameliorating a symptom of an infectious disease caused by a cellular
 CC pathogen such as mycobacterial disease, malaria, leishmaniasis,
 CC toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a
 CC symptom of an immunoglobulin E (IgE)-related disorder, preferably an
 CC allergy-related disorder, in particular asthma in an individual. The
 CC present sequence represents an immunomodulatory oligonucleotide from the
 CC present invention
 XX

XX SQ Sequence 16 BP; 2 A; 4 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 6; Length 16;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 Db 14 CGAACGTTTCG 5
 |||||

RESULT 83
 ADB88830
 ID ADB88830 standard; DNA; 16 BP.

XX ADB88830;
 XX
 XX 04-DEC-2003 (first entry)

XX Chimeric immunomodulatory compound DNA sequence, SEQ ID No 33.
 XX chimeric immunomodulatory compound; CIC; immunomodulatory activity;

KW spacer moiety; linear hexaethylene glycol structure; HEG; immune;
 KW Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma;
 KW IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating;
 KW immunoglobulin E; IgE; allergy; cancer;
 KW stimulating cellular immune system cell; ss.
 XX
 OS Synthetic.
 XX
 XX WO2003000922-A2.
 XX
 XX 03-JAN-2003.
 XX
 XX 21-JUN-2002; 2002WO-US020025.
 XX
 XX 21-JUN-2001; 2001US-0299883P.
 XX
 XX 23-APR-2002; 2002US-0375253P.
 XX
 XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX Fearon KL, Dina D, Tuck SF;
 XX
 XX WPI; 2003-210159/20.

XX Novel chimeric immunomodulatory compound having immunomodulatory
 PT activity, useful for modulating an immune response and for treating
 PT cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.
 XX
 XX Disclosure; Page 33; 224pp; English.

XX The invention relates to a novel chimeric immunomodulatory compound (CIC)
 CC having immunomodulatory activity, comprising two or more nucleic acid
 CC moieties and one or more non-nucleic acid spacer moieties, where at least
 CC one non-nucleic acid spacer moiety is covalently joined to two nucleic
 CC acid moieties, where the spacer is not a polypeptide, and at least one
 CC nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric
 CC immunomodulatory compounds more specifically contain the nucleic acid
 CC spacer moieties of linear hexaethylene glycol structure (HEG) subunits.
 CC CIC's are useful for modulating an immune response in an individual,
 CC where the individual suffers from a disorder associated with a Th2-type
 CC immune response which is an allergy or allergy-induced asthma, and an
 CC infectious disease. CIC is also useful for increasing IFN-gamma, or IFN-
 CC alpha, in an individual, where the individual has idiopathic pulmonary
 CC fibrosis, or a viral infection. CIC's are useful for ameliorating a
 CC symptom of an infectious disease, or an immunoglobulin E (IgE)-related
 CC disorder in an individual, where the IgE-related disorder is allergy, or
 CC an allergy-related disorder. CIC's are also useful for treating cancer
 CC and can be used for stimulating cellular immune system cells production
 CC in an individual. This polynucleotide sequence represents a DNA sequence
 CC which is a nucleic acid moiety part of a chimeric immunomodulatory compound
 CC of the invention.
 XX

XX SQ Sequence 16 BP; 2 A; 4 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 9; Length 16;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 Db 5 CGAACGTTTCG 14
 |||||

RESULT 84
 ADB88830/c
 ID ADB88830 standard; DNA; 16 BP.

XX ADB88830;
 XX
 XX 04-DEC-2003 (first entry)

XX Chimeric immunomodulatory compound DNA sequence, SEQ ID No 33.
 XX chimeric immunomodulatory compound; CIC; immunomodulatory activity;

spacer moiety; linear hexaethylene glycol structure; HEG; immune; Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma; IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating; immunoglobulin E; IgE; allergy; cancer; stimulating cellular immune system cell; ss.

Synthetic.

WO2003000922-A2.

03-JAN-2003.

21-JUN-2002; 2002WO-US020025.

21-JUN-2001; 2001US-0299883P.

23-APR-2002; 2002US-0375253P.

(DYNA-) DYNAVAX TECHNOLOGIES CORP.

Fearon KL, Dina D, Tuck SF;

WPI; 2003-210159/20.

Novel chimeric immunomodulatory compound having immunomodulatory activity, useful for modulating an immune response and for treating cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.

Disclosure; Page 33; 224pp; English.

The invention relates to a novel chimeric immunomodulatory compound (CIC) having immunomodulatory activity, comprising two or more nucleic acid moieties and one or more non-nucleic acid spacer moieties, where at least one non-nucleic acid spacer moiety is covalently joined to two nucleic acid moieties, where the spacer is not a polypeptide, and at least one nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric immunomodulatory compounds more specifically contain the nucleic acid spacer moieties of linear hexaethylene glycol structure (HEG) subunits. CIC's are useful for modulating an immune response in an individual, where the individual suffers from a disorder associated with a Th2-type immune response which is an allergy or allergy-induced asthma, and an infectious disease. CIC is also useful for increasing IFN-gamma, and an alpha; in an individual, where the individual has idiopathic pulmonary fibrosis, or a viral infection. CIC's are useful for ameliorating a symptom of an infectious disease, or an immunoglobulin E (IgE)-related disorder in an individual, where the IgE-related disorder is allergy, or an allergy-related disorder. CIC's are also useful for treating cancer and can be used for stimulating cellular immune system cells production in an individual. This polynucleotide sequence represents a DNA sequence which is a nucleic acid moiety part of a chimeric immunomodulatory compound of the invention.

Sequence 16 BP; 2 A; 4 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 9; Length 16;

Best Local Similarity 100.0%; Pred. No. 4.7e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 CGAACGTTTCG 10

|||||

14 CGAACGTTTCG 5

RESULT 85

ADK67587

ID ADK67587 standard; DNA; 16 BP.

AC ADK67587;

06-MAY-2004 (first entry)

Immunostimulant oligonucleotide 16TCG, for immunomodulatory composition.

Immunomodulator; immunostimulant; vaccine; ss.

XX OS

Synthetic.

WO2004014322-A2.

19-FEB-2004.

12-AUG-2003; 2003WO-US025415.

12-AUG-2002; 2002US-0402968P.

(DYNA-) DYNAVAX TECHNOLOGIES CORP.

Van Nest G, Tuck S;

WPI; 2004-238627/22.

Immunomodulatory composition useful for modulating immune responses in individuals, comprises immunomodulatory particles or a particulate composition made by mixing cationic condensing agent and an immunomodulatory compound.

Example 4; SEQ ID NO 17; 90pp; English.

The present sequence is that of an immunomodulatory compound (IMC), designated 16TCG, that can be used in novel immunomodulatory compositions of the invention. The IMC may contain modifications of the 3'OH or 5'OH group, the nucleotide base, the sugar component and phosphate group. Novel immunomodulatory compositions of the invention comprise a cationic condensing agent, an IMC comprising the nucleotide sequence 5'-CG-3', and a stabilising agent. The compositions form particles which have increased immunomodulatory activity as compared to IMCs not formulated in the compositions of the invention. The immunomodulatory compositions can be used for immunomodulation of an individual, e.g. when the individual suffers from a disorder associated with a Th2-type immune response (e.g. allergies or allergy-induced asthma), is receiving vaccines such as therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a mycobacterial epitope or a tumour associated epitope) or prophylactic vaccines, suffers from cancer, suffers from an infectious disease or is at risk of exposure to an infectious agent. In an example from the invention, IMC 16TCG was used to examine immunomodulation of human cells with particulate compositions incorporating a panel of IMC oligonucleotides.

Sequence 16 BP; 2 A; 4 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 12; Length 16;

Best Local Similarity 100.0%; Pred. No. 4.7e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 CGAACGTTTCG 10

|||||

5 CGAACGTTTCG 14

RESULT 86

ADK67587/c

ID ADK67587 standard; DNA; 16 BP.

AC ADK67587;

06-MAY-2004 (first entry)

Immunostimulant oligonucleotide 16TCG, for immunomodulatory composition.

Immunomodulator; immunostimulant; vaccine; ss.

Synthetic.

WO2004014322-A2.

19-FEB-2004.

PF 12-AUG-2003; 2003WO-US025415.
 XX
 PR 12-AUG-2002; 2002US-0402968P.
 XX
 PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 XX
 PI Van Nest G, Tuck S;
 XX WPI; 2004-238627/22.
 DR
 XX
 XX Immunomodulatory composition useful for modulating immune responses in
 PT individuals, comprises immunomodulatory particles or a particulate
 PT composition made by mixing cationic condensing agent and an
 PT immunomodulatory compound.
 XX
 XX Example 4; SEQ ID NO 17; 90pp; English.
 PS
 CC The present sequence is that of an immunomodulatory compound (IMC),
 CC designated 16TCG, that can be used in novel immunomodulatory compositions
 CC of the invention. The IMC may contain modifications of the 3'OH or 5'OH
 CC group, the nucleotide base, the sugar component and phosphate group.
 CC Novel immunomodulatory compositions of the invention comprise a cationic
 CC condensing agent, an IMC comprising the nucleotide sequence 5'-CG-3', and
 CC a stabilising agent. The compositions form particles which have increased
 CC immunomodulatory activity as compared to IMCs not formulated in the
 CC compositions of the invention. The immunomodulatory compositions can be
 CC used for immunomodulation of an individual, e.g. when the individual
 CC suffers from a disorder associated with a Th2-type immune response (e.g.
 CC allergies or allergy-induced asthma), is receiving vaccines such as
 CC therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a
 CC mycobacterial epitope or a tumour associated epitope) or prophylactic
 CC vaccines, suffers from cancer, suffers from an infectious disease or is
 CC at risk of exposure to an infectious agent. In an example from the
 CC invention, IMC 16TCG was used to examine immunomodulation of human cells
 CC with particulate compositions incorporating a panel of IMC
 CC oligonucleotides.
 XX
 SQ Sequence 16 BP; 2 A; 4 C; 4 G; 6 T; 0 U; 0 Other;
 Query Match 100.0%; Score 10; DB 12; Length 16;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 CGAACGTTTCG 10
 DB 14 CGAACGTTTCG 5
 RESULT 87
 ADQ95291
 ID ADQ95291 standard; DNA; 16 BP.
 XX
 AC ADQ95291;
 XX
 DT 07-OCT-2004 (first entry)
 DE
 XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 33.
 KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antitumor;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 IFN-alpha; ss.
 OS Synthetic.
 XX
 XX W02004058159-A2.
 PN
 XX 15-JUL-2004.
 PD
 XX 17-DEC-2003; 2003WO-US040417.
 PF

XX 23-DEC-2002; 2002US-0436406P.
 PR
 XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 PA
 PI Fearon XL;
 XX WPI; 2004-561515/54.
 DR
 XX
 XX New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.
 XX
 PS Disclosure; SEQ ID NO 33; 183pp; English.
 XX
 CC The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IGE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 SQ Sequence 16 BP; 2 A; 4 C; 4 G; 6 T; 0 U; 0 Other;
 Query Match 100.0%; Score 10; DB 12; Length 16;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 CGAACGTTTCG 10
 DB 5 CGAACGTTTCG 14
 RESULT 88
 ADQ95291/c
 ID ADQ95291 standard; DNA; 16 BP.
 XX
 AC ADQ95291;
 XX
 DT 07-OCT-2004 (first entry)
 DE
 XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 33.
 KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antitumor;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 IFN-alpha; ss.

KW IFN-alpha; ss.
 XX Synthetic.
 XX WO2004058159-A2.
 PN 15-JUL-2004.
 XX 17-DEC-2003; 2003WO-US040417.
 XX 23-DEC-2002; 2002US-0436406P.
 PR (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 XX Fearon KL;
 PI WPI; 2004-561515/54.
 DR New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.
 XX Disclosure; SEQ ID NO 33; 183pp; English.
 PS
 XX The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease, for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IGE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 SQ Sequence 16 BP; 2 A; 4 C; 4 G; 6 T; 0 U; 0 Other;
 Query Match 100.0%; Score 10; DB 12; Length 16;
 Best Local Similarity 100.0%; Pred. NO. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 CGAACGTTTCG 10
 Db 14 CGAACGTTTCG 5
 RESULT 89
 ID ADQ16821
 XX ADQ16821 standard; DNA; 16 BP.
 AC ADQ16821;
 XX 07-OCT-2004 (first entry)
 DT

XX Immunomodulatory polynucleotide, SEQ ID NO 100.
 XX
 DE Immunomodulatory polynucleotide; IMP; palindromic sequence; dinucleotide;
 XX trinucleotide; antimicrobial; anti-allergic; antiasthmatic;
 KW dermatological; antiinflammatory; ophthalmological; immunosuppressive;
 KW antibacterial; vasotropic; antiparasitic; virucide; hepatotropic;
 KW anti-HIV; cytostatic; antiulcer; nephrotropic; IGE-related disorder;
 KW T helper; (TH)2-type immune response; vaccine; prophylactic; immune;
 KW interferon-gamma; interferon-alpha; type I interferon; IFN-alpha;
 KW IFN-omega; IFN-gamma; plasmacytoid dendritic cell; ss.
 XX Unidentified.
 OS
 XX WO2004058179-A2.
 PN 15-JUL-2004.
 PD 18-DEC-2003; 2003WO-US041001.
 XX 23-DEC-2002; 2002US-0436122P.
 XX 13-FEB-2003; 2003US-0447885P.
 PR 01-MAY-2003; 2003US-0467546P.
 PR
 XX (DYNA-) DYNAVAX TECHNOLOGIES.
 PA Dina D, Fearon KL, Marshall J;
 XX WPI; 2004-525782/50.
 XX Immunomodulatory polynucleotide useful for the treatment of e.g. atopic
 PT dermatitis comprising palindromic sequence comprising at least eight bases
 PT in length, which contains at least two dinucleotides and at least one
 PT trinucleotide.
 XX Example 1; SEQ ID NO 100; 119pp; English.
 PS The invention relates to a novel immunomodulatory polynucleotide (IMP)
 CC comprising a palindromic sequence. The palindromic sequence comprises at
 CC least 8 bases in length, which contains at least two dinucleotides (CG),
 CC and at least one trinucleotide (TCG)ly at or near the 5' end of the
 CC polynucleotide. The CG dinucleotides are separated by 0 - 5 bases. The 5'
 CC T of the (TCG)ly is positioned 0 - 3 bases from the 5' end of the
 CC polynucleotide. The (TCG)ly is separated from the 5' end of the
 CC palindromic sequence by 0 - 2 bases. The palindromic sequence includes
 CC all or part of the (TCG)ly sequence, where y=1 or 2. The immunomodulatory
 CC polynucleotides have the following activities: antimicrobial,
 CC anti-allergic, antiasthmatic, dermatological, antiinflammatory,
 CC ophthalmological, immunosuppressive, antibacterial, vasotropic,
 CC antiparasitic, virucide, hepatotropic, anti-HIV, cytostatic, antiulcer,
 CC and nephrotropic. The immunomodulatory polynucleotides can be used for
 CC ameliorating a symptom of an infectious disease and IGE-related disorder.
 CC The IMP's may also be used for the treatment of a disorder associated
 CC with a T helper (TH)2-type immune response (e.g. allergies, allergy-
 CC induced asthma or atopic dermatitis), individuals receiving vaccines such
 CC as therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a
 CC mycobacterial epitope or a tumour associated epitope) or prophylactic
 CC vaccines. The IMP's can also be used for the treatment of e.g. food
 CC allergies, rhinitis, atopic dermatitis, conjunctivitis, urticaria, shock,
 CC Hymenoptera sting allergies and drug allergies and parasitic infections;
 CC viral disease e.g. Hepatitis B, Hepatitis C, influenza, Acquired
 CC immunodeficiency syndrome (AIDS) and Herpes zoster; and cancer;
 CC inflammatory disorder e.g. ulcerative colitis; fibrotic disorder e.g.
 CC idiopathic pulmonary fibrosis, scleroderma, cutaneous radiation-induced
 CC fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic
 CC fibrosis, renal fibrosis. The IMP's may also be used to create a
 CC prophylactic vaccine to increase resistance to infection by bacterial or
 CC viral pathogens. The immunomodulatory polynucleotide modulates an immune
 CC response; or increases interferon-gamma; or interferon-alpha; effectively
 CC stimulates cytokines including type I interferons e.g. IFN-alpha and IFN-
 CC omega and IFN-gamma, production from human cells; effectively stimulates
 CC B cells to proliferate; and activates plasmacytoid dendritic cells to
 CC undergo maturation which can result in retardation of plasmacytoid

CC dendritic cell apoptosis in culture. This polynucleotide sequence
 CC represents an immunomodulatory polynucleotide of the invention.

XX Sequence 16 BP; 3 A; 4 C; 5 G; 4 T; 0 U; 0 Other;

XX Query Match 100.0%; Score 10; DB 13; Length 16;

XX Best Local Similarity 100.0%; Pred. No. 4.7e+03;

XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

Db 5 CGAACGTTTCG 14

RESULT 90

ADQ16821/c

ID ADQ16821 standard; DNA; 16 BP.

XX AC ADQ16821;

XX DT 07-OCT-2004 (first entry)

XX DE Immunomodulatory polynucleotide, SEQ ID No 100.

XX KW Immunomodulatory polynucleotide; IMP; palindromic sequence; dinucleotide;
 KW trinucleotide; antimicrobial; antiallergic; antiasthmatic;
 KW dermatological; antiinflammatory; ophthalmological; immunosuppressive;
 KW antibacterial; vasotropic; antiparasitic; virucide; hepatotropic;
 KW anti-HIV; cytostatic; antiulcer; nephrotropic; IGS-related disorder;
 KW T helper; (TH)2-type immune response; vaccine; prophylactic; immune;
 KW interferon-gamma; interferon-alpha; type I interferon; IFN-alpha;
 KW IFN-omega; IFN-gamma; plasmacytoid dendritic cell; ss.

XX OS Unidentified.

XX PN WO2004058179-A2.

XX PD 15-JUL-2004.

XX PF 18-DEC-2003; 2003WO-US041001.

XX PR 23-DEC-2002; 2002US-0436122P.

XX PR 13-FEB-2003; 2003US-0447885P.

XX PR 01-MAY-2003; 2003US-0467546P.

XX PA (DYNA-) DYNAVAX TECHNOLOGIES.

XX PI Dina D, Fearon KL, Marshall J;

XX DR WPI; 2004-525782/50.

XX PT Immunomodulatory polynucleotide useful for the treatment of e.g. atopic
 PT dermatitis comprising palindromic sequence comprising at least eight bases
 PT in length, which contains at least two dinucleotides and at least one
 PT trinucleotide.

XX PS Example 1; SEQ ID NO 100; 119pp; English.

XX CC The invention relates to a novel immunomodulatory polynucleotide (IMP)
 CC comprising a palindromic sequence. The palindromic sequence comprises at
 CC least 8 bases in length, which contains at least two dinucleotides (CG),
 CC and at least one trinucleotide (TCG) at or near the 5' end of the
 CC polynucleotide. The CG dinucleotides are separated by 0 - 5 bases. The 5'
 CC T of the (TCG) is positioned 0 - 3 bases from the 5' end of the
 CC polynucleotide. The (TCG) is separated from the 5' end of the
 CC palindromic sequence by 0 - 2 bases. The palindromic sequence includes
 CC all or part of the (TCG) sequence, where Y=1 or 2. The immunomodulatory
 CC polynucleotides have the following activities: antimicrobial,
 CC antiallergic, antiasthmatic, dermatological, antiinflammatory,
 CC ophthalmological, immunosuppressive, antibacterial, vasotropic,
 CC antiparasitic, virucide, hepatotropic, anti-HIV, cytostatic, antiulcer,
 CC and nephrotropic. The immunomodulatory polynucleotides can be used for
 CC ameliorating a symptom of an infectious disease and IGS-related disorder.

CC The IMP's may also be used for the treatment of a disorder associated
 CC with a T helper (TH)2-type immune response (e.g. allergies, allergy-
 CC induced asthma or atopic dermatitis), individuals receiving vaccines such
 CC as therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a
 CC mycobacterial epitope or a tumour associated epitope) or prophylactic
 CC vaccines. The IMP's can also be used for the treatment of e.g. food
 CC allergies, rhinitis, atopic dermatitis, conjunctivitis, urticaria, shock,
 CC Hymenoptera sting allergies and drug allergies and parasitic infections;
 CC viral disease e.g. Hepatitis B, Hepatitis C, influenza, Acquired
 CC immunodeficiency syndrome (AIDS) and Herpes zoster; and cancer;
 CC inflammatory disorder e.g. ulcerative colitis; fibrotic disorder e.g.
 CC idiopathic pulmonary fibrosis, scleroderma, cutaneous radiation-induced
 CC fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic
 CC fibrosis, renal fibrosis. The IMP's may also be used to create a
 CC prophylactic vaccine to increase resistance to infection by bacterial or
 CC viral pathogens. The immunomodulatory polynucleotide modulates an immune
 CC response; or increases interferon-gamma; or interferon-alpha; effectively
 CC stimulates cytokines including type I interferons e.g. IFN-alpha and IFN-
 CC omega and IFN-gamma, production from human cells; effectively stimulates
 CC B cells to proliferate; and activates plasmacytoid dendritic cells to
 CC undergo maturation which can result in retardation of plasmacytoid
 CC dendritic cell apoptosis in culture. This polynucleotide sequence
 CC represents an immunomodulatory polynucleotide of the invention.

XX SQ Sequence 16 BP; 3 A; 4 C; 5 G; 4 T; 0 U; 0 Other;

XX Query Match 100.0%; Score 10; DB 13; Length 16;

XX Best Local Similarity 100.0%; Pred. No. 4.7e+03;

XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

Db 14 CGAACGTTTCG 5

RESULT 91

ADQ16733

ID ADQ16733 standard; DNA; 16 BP.

XX AC ADQ16733;

XX DT 07-OCT-2004 (first entry)

XX DE Immunomodulatory polynucleotide, SEQ ID No 12.

XX KW Immunomodulatory polynucleotide; IMP; palindromic sequence; dinucleotide;
 KW trinucleotide; antimicrobial; antiallergic; antiasthmatic;
 KW dermatological; antiinflammatory; ophthalmological; immunosuppressive;
 KW antibacterial; vasotropic; antiparasitic; virucide; hepatotropic;
 KW anti-HIV; cytostatic; antiulcer; nephrotropic; IGS-related disorder;
 KW T helper; (TH)2-type immune response; vaccine; prophylactic; immune;
 KW interferon-gamma; interferon-alpha; type I interferon; IFN-alpha;
 KW IFN-omega; IFN-gamma; plasmacytoid dendritic cell; ss.

XX OS Unidentified.

XX PN WO2004058179-A2.

XX PD 15-JUL-2004.

XX PF 18-DEC-2003; 2003WO-US041001.

XX PR 23-DEC-2002; 2002US-0436122P.

XX PR 13-FEB-2003; 2003US-0447885P.

XX PR 01-MAY-2003; 2003US-0467546P.

XX PA (DYNA-) DYNAVAX TECHNOLOGIES.

XX PI Dina D, Fearon KL, Marshall J;

XX DR WPI; 2004-525782/50.

XX PT Immunomodulatory polynucleotide useful for the treatment of e.g. atopic

PT dermatitis comprises palindromic sequence comprising at least eight bases
 PT in length, which contains at least two dinucleotides and at least one
 PT trinucleotide.

PS Example 1; SEQ ID NO 12; 119pp; English.

XX The invention relates to a novel immunomodulatory polynucleotide (IMP)
 CC comprising a palindromic sequence. The palindromic sequence comprises at
 CC least 8 bases in length, which contains at least two dinucleotides (CG),
 CC and at least one trinucleotide (TCG) at or near the 5' end of the
 CC polynucleotide. The CG dinucleotides are separated by 0 - 5 bases. The 5'
 CC T of the (TCG) is positioned 0 - 3 bases from the 5' end of the
 CC polynucleotide. The (TCG) is separated from the 5' end of the
 CC palindromic sequence by 0 - 2 bases. The palindromic sequence includes
 CC all or part of the (TCG) sequence, where y=1 or 2. The immunomodulatory
 CC polynucleotides have the following activities: antimicrobial,
 CC anti-allergic, antiasthmatic, dermatological, anti-infectious,
 CC ophthalmological, immunosuppressive, antibacterial, vasotropic,
 CC antiparasitic, virucide, hepatotropic, anti-HIV, cytostatic, antiulcer,
 CC and nephrotropic. The immunomodulatory polynucleotides can be used for
 CC ameliorating a symptom of an infectious disease and IGE-related disorder.
 CC The IMP's may also be used for the treatment of a disorder associated
 CC with a T helper (TH)2-type immune response (e.g. allergies, allergy-
 CC induced asthma or atopic dermatitis), individuals receiving vaccines such
 CC as therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a
 CC mycobacterial epitope or a tumour associated epitope) or prophylactic
 CC vaccines. The IMP's can also be used for the treatment of e.g. food
 CC allergies, rhinitis, atopic dermatitis, conjunctivitis, urticaria, shock,
 CC Hymenoptera sting allergies and drug allergies and parasitic infections;
 CC viral disease e.g. Hepatitis B, Hepatitis C, influenza, Acquired
 CC immunodeficiency syndrome (AIDS) and Herpes zoster; and cancer;
 CC inflammatory disorder e.g. ulcerative colitis; fibrotic disorder e.g.
 CC idiopathic pulmonary fibrosis, scleroderma, cutaneous radiation-induced
 CC fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic
 CC fibrosis, renal fibrosis. The IMP's may also be used to create a
 CC prophylactic vaccine to increase resistance to infection by bacterial or
 CC viral pathogens. The immunomodulatory polynucleotide modulates an immune
 CC response; or increases interferon-gamma; or interferon-alpha; effectively
 CC stimulates cytokines including type I interferons e.g. IFN-alpha and IFN-
 CC omega and IFN-gamma, production from human cells; effectively stimulates
 CC B cells to proliferate; and activates plasmacytoid dendritic cells to
 CC undergo maturation which can result in retardation of plasmacytoid
 CC dendritic cell apoptosis in culture. This polynucleotide sequence
 CC represents an immunomodulatory polynucleotide of the invention.

XX Sequence 16 BP; 2 A; 4 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 13; Length 16;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 Db 5 CGAACGTTTCG 14

RESULT 92

ADQ16733/c

ID ADQ16733 standard; DNA; 16 BP.

XX ADQ16733;

DT 07-OCT-2004 (first entry)

DE Immunomodulatory polynucleotide, SEQ ID NO 12.

XX Immunomodulatory polynucleotide; IMP; palindromic sequence; dinucleotide;
 KW trinucleotide; antimicrobial; anti-allergic; antiasthmatic;
 KW dermatological; anti-inflammatory; ophthalmological; immunosuppressive;
 KW antibacterial; vasotropic; antiparasitic; virucide; hepatotropic;
 KW anti-HIV; cytostatic; antiulcer; nephrotropic; IGE-related disorder;
 KW T helper; (TH)2-type immune response; vaccine; prophylactic; immune;
 KW interferon-gamma; interferon-alpha; type I interferon; IFN-alpha;

IFN-omega; IFN-gamma; plasmacytoid dendritic cell; ss.

Unidentified.

WO2004058179-A2.

15-JUN-2004.

18-DEC-2003; 2003WO-US041001.

23-DEC-2002; 2002US-0436122P.

13-FEB-2003; 2003US-044785P.

01-MAY-2003; 2003US-0467546P.

(DYNA-) DYNAVAX TECHNOLOGIES.

Dina D, Fearon KL, Marshall J;

WPI; 2004-525782/50.

Immunomodulatory polynucleotide useful for the treatment of e.g. atopic
 dermatitis comprises palindromic sequence comprising at least eight bases
 in length, which contains at least two dinucleotides and at least one
 trinucleotide.

Example 1; SEQ ID NO 12; 119pp; English.

The invention relates to a novel immunomodulatory polynucleotide (IMP)
 comprising a palindromic sequence. The palindromic sequence comprises at
 least 8 bases in length, which contains at least two dinucleotides (CG),
 and at least one trinucleotide (TCG) at or near the 5' end of the
 polynucleotide. The CG dinucleotides are separated by 0 - 5 bases. The 5'
 T of the (TCG) is positioned 0 - 3 bases from the 5' end of the
 polynucleotide. The (TCG) is separated from the 5' end of the
 palindromic sequence by 0 - 2 bases. The palindromic sequence includes
 all or part of the (TCG) sequence, where y=1 or 2. The immunomodulatory
 polynucleotides have the following activities: antimicrobial,
 anti-allergic, antiasthmatic, dermatological, anti-inflammatory,
 ophthalmological, immunosuppressive, antibacterial, vasotropic,
 antiparasitic, virucide, hepatotropic, anti-HIV, cytostatic, antiulcer,
 and nephrotropic. The immunomodulatory polynucleotides can be used for
 ameliorating a symptom of an infectious disease and IGE-related disorder.
 The IMP's may also be used for the treatment of a disorder associated
 with a T helper (TH)2-type immune response (e.g. allergies, allergy-
 induced asthma or atopic dermatitis), individuals receiving vaccines such
 as therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a
 mycobacterial epitope or a tumour associated epitope) or prophylactic
 vaccines. The IMP's can also be used for the treatment of e.g. food
 allergies, rhinitis, atopic dermatitis, conjunctivitis, urticaria, shock,
 Hymenoptera sting allergies and drug allergies and parasitic infections;
 viral disease e.g. Hepatitis B, Hepatitis C, influenza, Acquired
 immunodeficiency syndrome (AIDS) and Herpes zoster; and cancer;
 inflammatory disorder e.g. ulcerative colitis; fibrotic disorder e.g.
 idiopathic pulmonary fibrosis, scleroderma, cutaneous radiation-induced
 fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic
 fibrosis, renal fibrosis. The IMP's may also be used to create a
 prophylactic vaccine to increase resistance to infection by bacterial or
 viral pathogens. The immunomodulatory polynucleotide modulates an immune
 response; or increases interferon-gamma; or interferon-alpha; effectively
 stimulates cytokines including type I interferons e.g. IFN-alpha and IFN-
 omega and IFN-gamma, production from human cells; effectively stimulates
 B cells to proliferate; and activates plasmacytoid dendritic cells to
 undergo maturation which can result in retardation of plasmacytoid
 dendritic cell apoptosis in culture. This polynucleotide sequence
 represents an immunomodulatory polynucleotide of the invention.

Sequence 16 BP; 2 A; 4 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 13; Length 16;

Best Local Similarity 100.0%; Pred. No. 4.7e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

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Db          14 CGAACGTTTCG 5
          |||||
RESULT 93
ADQ16775
ID ADQ16775 standard; DNA; 17 BP.
XX
XX
AC ADQ16775;
XX
XX 07-OCT-2004 (first entry)
XX
XX Immunomodulatory polynucleotide, SEQ ID NO 54.
XX
XX Immunomodulatory polynucleotide; IMP; palindromic sequence; dinucleotide;
XX trinucleotide; antimicrobial; anti-allergic; antiasthmatic;
XX dermatological; anti-inflammatory; ophthalmological; immunosuppressive;
XX antibacterial; vasotrophic; antiparasitic; virucide; hepatotropic;
XX anti-HIV; cytostatic; antiulcer; nephrotropic; IgE-related disorder;
XX T helper; (TH)2-type immune response; vaccine; prophylactic; immune;
XX interferon-gamma; interferon-alpha; type I interferon; IFN-alpha;
XX IFN-omega; IFN-gamma; plasmacytoid dendritic cell; ss.
XX
XX Unidentified.
XX
XX WO2004058179-A2.
XX
XX 15-JUL-2004.
XX
XX 18-DEC-2003; 2003WO-US041001.
XX
XX 23-DEC-2002; 2002US-0436122P.
XX
XX 13-FEB-2003; 2003US-0447885P.
XX
XX 01-MAY-2003; 2003US-0467546P.
XX
XX (DYNA-) DYNAVAX TECHNOLOGIES.
XX
XX Dina D, Fearon KL, Marshall J;
XX WPI; 2004-525782/50.
XX
XX Immunomodulatory polynucleotide useful for the treatment of e.g. atopic
XX dermatitis comprises palindromic sequence comprising at least eight bases
XX in length, which contains at least two dinucleotides and at least one
XX trinucleotide.
XX
XX Example 1; SEQ ID NO 54; 119pp; English.
XX
XX The invention relates to a novel immunomodulatory polynucleotide (IMP)
XX comprising a palindromic sequence. The palindromic sequence comprises at
XX least 8 bases in length, which contains at least two dinucleotides (CG),
XX and at least one trinucleotide (TCG) at or near the 5' end of the
XX polynucleotide. The CG dinucleotides are separated by 0 - 5 bases. The 5'
XX T of the (TCG) is positioned 0 - 3 bases from the 5' end of the
XX polynucleotide. The (TCG) is separated from the 5' end of the
XX palindromic sequence by 0 - 2 bases. The palindromic sequence includes
XX all or part of the (TCG) sequence, where y= 1 or 2. The immunomodulatory
XX polynucleotides have the following activities: antimicrobial,
XX anti-allergic, antiasthmatic, dermatological, anti-inflammatory,
XX ophthalmological, immunosuppressive, antibacterial, vasotrophic,
XX antiparasitic, virucide, hepatotropic, anti-HIV, cytostatic, antiulcer,
XX and nephrotropic. The immunomodulatory polynucleotides can be used for
XX ameliorating a symptom of an infectious disease and IgE-related disorder.
XX The IMP's may also be used for the treatment of a disorder associated
XX with a T helper (TH)2-type immune response (e.g. allergies, allergy-
XX induced asthma or atopic dermatitis), individuals receiving vaccines such
XX as therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a
XX mycobacterial epitope or a tumour associated epitope) or prophylactic
XX vaccines. The IMP's can also be used for the treatment of e.g. food
XX allergies, rhinitis, atopic dermatitis, conjunctivitis, urticaria, shock,
XX Hymenoptera sting allergies and drug allergies and parasitic infections;
XX viral disease e.g. Hepatitis B, Hepatitis C, Influenza, Acquired
XX immunodeficiency syndrome (AIDS) and Herpes zoster; and cancer;

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CC inflammatory disorder e.g. ulcerative colitis; fibrotic disorder e.g.
CC idiopathic pulmonary fibrosis, scleroderma, cutaneous radiation-induced
CC fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic
CC fibrosis, renal fibrosis. The IMP's may also be used to create a
CC prophylactic vaccine to increase resistance to infection by bacterial or
CC viral pathogens. The immunomodulatory polynucleotide modulates an immune
CC response; or increases interferon-gamma; or interferon-alpha; effectively
CC stimulates cytokines including type I interferons e.g. IFN-alpha and IFN-
CC omega and IFN-gamma, production from human cells; effectively stimulates
CC B cells to proliferate; and activates plasmacytoid dendritic cells to
CC undergo maturation which can result in retardation of plasmacytoid
CC dendritic cell apoptosis in culture. This polynucleotide sequence
CC represents an immunomodulatory polynucleotide of the invention.
XX
XX Sequence 17 BP; 4 A; 4 C; 4 G; 5 T; 0 U; 0 Other;
SQ
Query Match 100.0%; Score 10; DB 13; Length 17;
Best Local Similarity 100.0%; Pred. No. 4.7e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
Db 6 CGAACGTTTCG 15
RESULT 94
ADQ16775/c
ID ADQ16775 standard; DNA; 17 BP.
XX
XX ADQ16775;
XX
XX 07-OCT-2004 (first entry)
XX
XX Immunomodulatory polynucleotide, SEQ ID NO 54.
XX
XX Immunomodulatory polynucleotide; IMP; palindromic sequence; dinucleotide;
XX trinucleotide; antimicrobial; anti-allergic; antiasthmatic;
XX dermatological; anti-inflammatory; ophthalmological; immunosuppressive;
XX antibacterial; vasotrophic; antiparasitic; virucide; hepatotropic;
XX anti-HIV; cytostatic; antiulcer; nephrotropic; IgE-related disorder;
XX T helper; (TH)2-type immune response; vaccine; prophylactic; immune;
XX interferon-gamma; interferon-alpha; type I interferon; IFN-alpha;
XX IFN-omega; IFN-gamma; plasmacytoid dendritic cell; ss.
XX
XX Unidentified.
XX
XX WO2004058179-A2.
XX
XX 15-JUL-2004.
XX
XX 18-DEC-2003; 2003WO-US041001.
XX
XX 23-DEC-2002; 2002US-0436122P.
XX
XX 13-FEB-2003; 2003US-0447885P.
XX
XX 01-MAY-2003; 2003US-0467546P.
XX
XX (DYNA-) DYNAVAX TECHNOLOGIES.
XX
XX Dina D, Fearon KL, Marshall J;
XX WPI; 2004-525782/50.
XX
XX Immunomodulatory polynucleotide useful for the treatment of e.g. atopic
XX dermatitis comprises palindromic sequence comprising at least eight bases
XX in length, which contains at least two dinucleotides and at least one
XX trinucleotide.
XX
XX Example 1; SEQ ID NO 54; 119pp; English.
XX
XX The invention relates to a novel immunomodulatory polynucleotide (IMP)
XX comprising a palindromic sequence. The palindromic sequence comprises at
XX least 8 bases in length, which contains at least two dinucleotides (CG),
XX and at least one trinucleotide (TCG) at or near the 5' end of the
XX polynucleotide. The CG dinucleotides are separated by 0 - 5 bases. The 5'
XX T of the (TCG) is positioned 0 - 3 bases from the 5' end of the
XX polynucleotide. The (TCG) is separated from the 5' end of the
XX palindromic sequence by 0 - 2 bases. The palindromic sequence includes
XX all or part of the (TCG) sequence, where y= 1 or 2. The immunomodulatory
XX polynucleotides have the following activities: antimicrobial,
XX anti-allergic, antiasthmatic, dermatological, anti-inflammatory,
XX ophthalmological, immunosuppressive, antibacterial, vasotrophic,
XX antiparasitic, virucide, hepatotropic, anti-HIV, cytostatic, antiulcer,
XX and nephrotropic. The immunomodulatory polynucleotides can be used for
XX ameliorating a symptom of an infectious disease and IgE-related disorder.
XX The IMP's may also be used for the treatment of a disorder associated
XX with a T helper (TH)2-type immune response (e.g. allergies, allergy-
XX induced asthma or atopic dermatitis), individuals receiving vaccines such
XX as therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a
XX mycobacterial epitope or a tumour associated epitope) or prophylactic
XX vaccines. The IMP's can also be used for the treatment of e.g. food
XX allergies, rhinitis, atopic dermatitis, conjunctivitis, urticaria, shock,
XX Hymenoptera sting allergies and drug allergies and parasitic infections;
XX viral disease e.g. Hepatitis B, Hepatitis C, Influenza, Acquired
XX immunodeficiency syndrome (AIDS) and Herpes zoster; and cancer;

```

CC polynucleotide. The CG dinucleotides are separated by 0 - 5 bases. The 5' T of the (TCG)Y is positioned 0 - 3 bases from the 5' end of the CC polynucleotide. The (TCG)Y is separated from the 5' end of the CC palindromic sequence by 0 - 2 bases. The palindromic sequence includes all or part of the (TCG)Y sequence, where Y=1 or 2. The immunomodulatory CC polynucleotides have the following activities: antimicrobial, antiallergic, antiasthmatic, dermatological, antiinflammatory, ophthalmological, immunosuppressive, antibacterial, vasotropic, antiparasitic, virucide, hepatotropic, anti-HIV, cytostatic, antitumor, and nephrotropic. The immunomodulatory polynucleotides can be used for ameliorating a symptom of an infectious disease and IgE-related disorder. CC The IMP's may also be used for the treatment of a disorder associated with a T helper (TH)2-type immune response (e.g. allergies, allergy-induced asthma or atopic dermatitis), individuals receiving vaccines such as therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a mycobacterial epitope or a tumour associated epitope) or prophylactic CC vaccines. The IMP's can also be used for the treatment of e.g. food allergies, rhinitis, atopic dermatitis, conjunctivitis, urticaria, shock, CC Hymenoptera sting allergies and drug allergies and parasitic infections; CC viral disease e.g. Hepatitis B, Hepatitis C, Influenza, Acquired CC immunodeficiency syndrome (AIDS) and Herpes zoster; and cancer; CC inflammatory disorder e.g. ulcerative colitis; fibrotic disorder e.g. CC idiopathic pulmonary fibrosis, scleroderma, cutaneous radiation-induced CC fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic CC fibrosis, renal fibrosis. The IMP's may also be used to create a CC prophylactic vaccine to increase resistance to infection by bacterial or CC viral pathogens. The immunomodulatory polynucleotide modulates an immune CC response; or increases interferon-gamma; or interferon-alpha; effectively CC stimulates cytokines including type I interferons e.g. IFN-alpha and IFN-omega and IFN-gamma, production from human cells; effectively stimulates CC B cells to proliferate; and activates plasmacytoid dendritic cells to CC undergo maturation which can result in retardation of plasmacytoid CC dendritic cell apoptosis in culture. This polynucleotide sequence CC represents an immunomodulatory polynucleotide of the invention.

XX SQ Sequence 17 BP; 4 A; 4 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 13; Length 17;
Best Local Similarity 100.0%; Pred. No. 4.7e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTCG 10
Db 15 CGAACGTCG 6
|||||

RESULT 95
ABQ75165
ID ABQ75165 standard; DNA; 18 BP.

XX AC ABQ75165;

XX DT 05-NOV-2002 (first entry)

XX DE ISS immunomodulatory oligonucleotide SEQ ID NO:14.

XX KW Immunostimulatory sequence; ISS: immunomodulatory; immune response;
KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
KW immunoglobulin E; IgE-related disorder; antiallergic; antiasthmatic;
KW virucide; antibacterial; protozoacide; ss.

XX OS Synthetic.

XX PN WQ200252002-A2.

XX PD 04-JUL-2002.

XX PF 27-DEC-2001; 2001WO-US050821.

XX PR 27-DEC-2000; 2000US-0258675P.

XX PA

(DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX PI Fearon KL, Dina D;

XX DR WPI; 2002-657426/70.

XX PT Immunomodulatory polynucleotide for modulating an immune response in a
subject suffering from disorders associated with Th2-type immune
response, e.g. allergy, or infectious disease, comprises an
immunostimulatory sequence.

XX PS Example 1; Page 20; 95pp; English.

XX CC The present invention describes an immunomodulatory polynucleotide (I) comprising an immunostimulatory sequence (ISS). Also described: (1) an immunomodulatory composition comprising (I); (2) an immunomodulatory polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a biodegradable MC, where the MC is less than 10 micrometre in size; and (3) a kit comprising (I). (I) has anti-allergic, antiasthmatic, virucide, CC antibacterial and protozoacide activities, and can be used as a modulator of immune response. (I) is useful for modulating an immune response in an individual suffering from disorders associated with a Th2-type immune CC response, especially an allergy or asthma, or an infectious disease. (I) is also useful for increasing interferon-gamma (IFN-gamma) in an individual having idiopathic pulmonary fibrosis, or IFN-alpha in an individual having a viral infection. (I) is further useful for ameliorating a symptom of an infectious disease caused by a cellular CC pathogen such as mycobacterial disease, malaria, leishmaniasis, toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a symptom of an immunoglobulin E (IgE)-related disorder, preferably an allergy-related disorder, in particular asthma in an individual. The CC present sequence represents an immunomodulatory oligonucleotide from the present invention

XX SQ Sequence 18 BP; 4 A; 4 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 6; Length 18;
Best Local Similarity 100.0%; Pred. No. 4.7e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTCG 10
Db 4 CGAACGTCG 13
|||||

RESULT 96
ABQ75165/c

ID ABQ75165 standard; DNA; 18 BP.

XX AC ABQ75165;

XX DT 05-NOV-2002 (first entry)

XX DE ISS immunomodulatory oligonucleotide SEQ ID NO:14.

XX KW Immunostimulatory sequence; ISS: immunomodulatory; immune response;
KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
KW immunoglobulin E; IgE-related disorder; antiallergic; antiasthmatic;
KW virucide; antibacterial; protozoacide; ss.

XX OS Synthetic.

XX PN WQ200252002-A2.

XX PD 04-JUL-2002.

XX PF 27-DEC-2001; 2001WO-US050821.

XX PR 27-DEC-2000; 2000US-0258675P.

XX PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX FI Fearon KL, Dina D, Tuck SF;
XX DR WPI; 2003-210159/20.
XX XX
XX PT Novel chimeric immunomodulatory compound having immunomodulatory
XX PT activity, useful for modulating an immune response and for treating
XX PT cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.
XX PS
XX PS Disclosure; Page 33; 224pp; English.
XX XX
XX CC The invention relates to a novel chimeric immunomodulatory compound (CIC)
XX CC having immunomodulatory activity, comprising two or more nucleic acid
XX CC moieties and one or more non-nucleic acid spacer moieties, where at least
XX CC one non-nucleic acid spacer moiety is covalently joined to two nucleic
XX CC acid moieties, where the spacer is not a polypeptide, and at least one
XX CC nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric
XX CC immunomodulatory compounds more specifically contain the nucleic acid
XX CC spacer moieties of linear hexaethylene glycol structure (HEG) subunits.
XX CC CIC's are useful for modulating an immune response in an individual,
XX CC where the individual suffers from a disorder associated with a Th2-type
XX CC immune response which is an allergy or allergy-induced asthma, and an
XX CC infectious disease. CIC is also useful for increasing IFN-gamma, or IFN-
XX CC alpha, in an individual, where the individual has idiopathic pulmonary
XX CC fibrosis, or a viral infection. CIC's are useful for ameliorating a
XX CC symptom of an infectious disease, or an immunoglobulin E (IgE)-related
XX CC disorder in an individual, where the IgE-related disorder is allergy, or
XX CC an allergy-related disorder. CIC's are also useful for treating cancer
XX CC and can be used for stimulating cellular immune system cells production
XX CC in an individual. This polynucleotide sequence represents a DNA sequence
XX CC of which is a nucleic acid moiety part of a chimeric immunomodulatory compound
XX CC of the invention.
XX XX
XX SQ Sequence 18 BP; 4 A; 4 C; 5 G; 5 T; 0 U; 0 Other;
Query Match 100.0%; Score 10; DB 9; Length 18;
Best Local Similarity 100.0%; Pred. No. 4.7e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 CGAACGTTTCG 10
| | | | | | | |
DB 13 CGAACGTTTCG 4
RESULT 99
ADQ95294 100.0%; Score 10; DB 9; Length 18;
ID ADQ95294 standard; DNA; 18 BP.
XX AC ADQ95294;
XX XX
XX DT 07-OCT-2004 (first entry)
XX XX
XX DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 36.
XX XX
XX KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
XX KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
XX KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
XX KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antitumor;
XX KW Gastrointestinal; Nephrotropic; Branched immunomodulatory compound;
XX KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
XX KW IFN-alpha; ss.
XX OS Synthetic.
XX XX
XX FN WO2004058159-A2.
XX XX
XX PD 15-JUL-2004.
XX XX
XX PF 17-DEC-2003; 2003WO-US040417.
XX XX
XX PR 23-DEC-2002; 2002US-0436406P.
XX XX
XX PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX FI Fearon KL;
XX DR WPI; 2004-561515/54.
XX XX
XX PT New branched immunomodulatory compound comprising at least three nucleic
XX PT acid moieties and at least one branch-point nucleoside, useful for
XX PT modulating an immune response in individual suffering e.g. allergy.
XX PS
XX PS Disclosure; SEQ ID NO 36; 183pp; English.
XX XX
XX CC The present invention relates to novel branched immunomodulatory
XX CC compounds (BIC) comprising at least three nucleic acid moieties, at least
XX CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
XX CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
XX CC e.g. the ability to stimulate interferon (IFN)-gamma production from
XX CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
XX CC alpha production from human peripheral blood mononuclear cells and the
XX CC ability to stimulate B cell proliferation. The BIC compounds are useful
XX CC for modulating an immune response in an individual suffering from a
XX CC disorder associated with a T helper (Th)2-type immune response e.g.
XX CC allergy, allergy-induced asthma or an infectious disease; for increasing
XX CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
XX CC are also useful for immunomodulation of cells and individuals; in the
XX CC fields of biomedicine and immunology; for the manufacture of a medicament
XX CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
XX CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
XX CC ameliorating an IgE-related disorder in an individual. The disorders
XX CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
XX CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
XX CC cancer; infectious disease resistant to humoral immune responses (e.g.
XX CC diseases caused by mycobacterial infections and intracellular pathogens,
XX CC cellular pathogens e.g. bacteria or protozoans or by subcellular
XX CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
XX CC leprosy or M. marinum or M. ulcerans infections; herpes viruses; diseases
XX CC caused by intracellular parasites such as malaria; leishmaniasis,
XX CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
XX CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
XX CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
XX CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
XX CC the BIC compounds of the invention.
XX XX
XX SQ Sequence 18 BP; 4 A; 4 C; 5 G; 5 T; 0 U; 0 Other;
Query Match 100.0%; Score 10; DB 12; Length 18;
Best Local Similarity 100.0%; Pred. No. 4.7e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 CGAACGTTTCG 10
| | | | | | | |
DB 4 CGAACGTTTCG 13
RESULT 100
ADQ95294/c
ID ADQ95294 standard; DNA; 18 BP.
XX AC ADQ95294;
XX XX
XX DT 07-OCT-2004 (first entry)
XX XX
XX DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 36.
XX XX
XX KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
XX KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
XX KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
XX KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antitumor;
XX KW Gastrointestinal; Nephrotropic; Branched immunomodulatory compound;
XX KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
XX KW IFN-alpha; ss.
XX OS Synthetic.
XX XX

PN WO2004058159-A2.
 XX
 PD 15-JUL-2004.
 XX
 PF 17-DEC-2003; 2003WO-US040417.
 XX
 PR 23-DEC-2002; 2002US-0436406P.
 XX
 XX (DYNA-) DYNAXX TECHNOLOGIES CORP.
 PA
 XX Fearon KL;
 PI
 XX WPI; 2004-561515/54.
 DR
 XX
 XX New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.
 XX
 XX Disclosure; SEQ ID NO 36; 183pp; English.
 XX
 XX The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th) 2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IGE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marium or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 SQ Sequence 18 BP; 4 A; 4 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 12; Length 18;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 Db 13 CGAACGTTTCG 4

Search completed: June 30, 2005, 00:38:20
 Job time : 220.5 secs

81 10 100.0 18 17 US-10-328-578-36 Sequence 36, Appl
c 82 10 100.0 18 17 US-10-328-578-36 Sequence 36, Appl
83 10 100.0 18 19 US-10-623-371-36 Sequence 36, Appl
c 84 10 100.0 18 19 US-10-623-371-36 Sequence 36, Appl
85 10 100.0 18 19 US-10-739-518-36 Sequence 36, Appl
c 86 10 100.0 18 19 US-10-739-518-36 Sequence 36, Appl
87 10 100.0 19 10 US-09-927-422A-16 Sequence 16, Appl
c 88 10 100.0 19 10 US-09-927-422A-16 Sequence 16, Appl
89 10 100.0 19 14 US-10-033-243-19 Sequence 19, Appl
c 90 10 100.0 19 14 US-10-033-243-19 Sequence 19, Appl
91 10 100.0 19 16 US-10-176-883-41 Sequence 41, Appl
c 92 10 100.0 19 16 US-10-176-883-41 Sequence 41, Appl
93 10 100.0 19 16 US-10-177-826-41 Sequence 41, Appl
c 94 10 100.0 19 16 US-10-177-826-41 Sequence 41, Appl
95 10 100.0 19 17 US-10-328-578-41 Sequence 41, Appl
c 96 10 100.0 19 17 US-10-328-578-41 Sequence 41, Appl
97 10 100.0 19 19 US-10-623-371-41 Sequence 41, Appl
c 98 10 100.0 19 19 US-10-623-371-41 Sequence 41, Appl
99 10 100.0 19 19 US-10-739-518-41 Sequence 41, Appl
c 100 10 100.0 19 19 US-10-739-518-41 Sequence 41, Appl

ALIGNMENTS

RESULT 1
US-10-033-243-77
; Sequence 77, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03
; PRIOR FILING DATE: 2002-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 77
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-77

Query Match 100.0%; Score 10; DB 14; Length 10;
Best Local Similarity 100.0%; Pred. No. 7.3e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
Db 1 CGAACGTTTCG 10
|||||

RESULT 2
US-10-033-243-77/c
; Sequence 77, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03
; PRIOR FILING DATE: 2002-12-27
; NUMBER OF SEQ ID NOS: 133

; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 77
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-77

Query Match 100.0%; Score 10; DB 14; Length 10;
Best Local Similarity 100.0%; Pred. No. 7.3e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
Db 10 CGAACGTTTCG 1
|||||

RESULT 3
US-10-176-883-17
; Sequence 17, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-I
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-17

Query Match 100.0%; Score 10; DB 16; Length 10;
Best Local Similarity 100.0%; Pred. No. 7.3e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
Db 1 CGAACGTTTCG 10
|||||

RESULT 4
US-10-176-883-17/c
; Sequence 17, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-I
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0


```
; SEQ ID NO 17
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-17

Query Match      100.0%; Score 10; DB 16; Length 10;
Best Local Similarity 100.0%; Pred. No. 7.3e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 10 CGAACGTTTCG 1

RESULT 5
US-10-177-826-17
; Sequence 17, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-II
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-17

Query Match      100.0%; Score 10; DB 16; Length 10;
Best Local Similarity 100.0%; Pred. No. 7.3e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 1 CGAACGTTTCG 10

RESULT 6
US-10-177-826-17/c
; Sequence 17, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-II
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 17

; SEQ ID NO 17
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-17/c

Query Match      100.0%; Score 10; DB 16; Length 10;
Best Local Similarity 100.0%; Pred. No. 7.3e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 1 CGAACGTTTCG 10

RESULT 7
US-10-328-578-17
; Sequence 17, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-III
; FILE REFERENCE: 377882002020
; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-17

Query Match      100.0%; Score 10; DB 17; Length 10;
Best Local Similarity 100.0%; Pred. No. 7.3e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 1 CGAACGTTTCG 10

RESULT 8
US-10-328-578-17/c
; Sequence 17, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-III
; FILE REFERENCE: 377882002020
; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
```

; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-17

Query Match 100.0%; Score 10; DB 17; Length 10;
Best Local Similarity 100.0%; Pred. No. 7.3e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
|||
Db 10 CGAACGTTTCG 1

RESULT 9

US-10-623-371-17
; Sequence 17, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-IV
; FILE REFERENCE: 377882002021
; CURRENT APPLICATION NUMBER: US/10/623,371
; CURRENT FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US 10/328,578
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-623-371-17

Query Match 100.0%; Score 10; DB 19; Length 10;
Best Local Similarity 100.0%; Pred. No. 7.3e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
|||
Db 1 CGAACGTTTCG 10

RESULT 10

US-10-623-371-17/c
; Sequence 17, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; APPLICANT: TUCK, Stephen F.

; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-IV
; FILE REFERENCE: 377882002021
; CURRENT APPLICATION NUMBER: US/10/623,371
; CURRENT FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US 10/328,578
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-623-371-17

Query Match 100.0%; Score 10; DB 19; Length 10;
Best Local Similarity 100.0%; Pred. No. 7.3e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
|||
Db 10 CGAACGTTTCG 1

RESULT 11

US-10-739-518-17
; Sequence 17, Application US/10739518
; Publication No. US20040136948A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; TITLE OF INVENTION: BRANCHED IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 377882003200
; CURRENT APPLICATION NUMBER: US/10/739,518
; CURRENT FILING DATE: 2003-12-17
; PRIOR APPLICATION NUMBER: US 60/436,406
; PRIOR FILING DATE: 2002-12-23
; NUMBER OF SEQ ID NOS: 148
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Construct
US-10-739-518-17

Query Match 100.0%; Score 10; DB 19; Length 10;
Best Local Similarity 100.0%; Pred. No. 7.3e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
|||
Db 1 CGAACGTTTCG 10

RESULT 12

US-10-739-518-17/c
; Sequence 17, Application US/10739518
; Publication No. US20040136948A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; TITLE OF INVENTION: BRANCHED IMMUNOMODULATORY COMPOUNDS AND

; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 377882003200
; CURRENT APPLICATION NUMBER: US/10/739,518
; CURRENT FILING DATE: 2003-12-17
; PRIOR APPLICATION NUMBER: US 60/436,406
; PRIOR FILING DATE: 2002-12-23
; NUMBER OF SEQ ID NOS: 148
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Construct
US-10-739-518-17

Query Match 100.0%; Score 10; DB 19; Length 10;
Best Local Similarity 100.0%; Pred. No. 7.3e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 10 CGAACGTTTCG 1
|||||

RESULT 13

US-10-033-243-102
; Sequence 102, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 102
; LENGTH: 11
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-102

Query Match 100.0%; Score 10; DB 14; Length 11;
Best Local Similarity 100.0%; Pred. No. 7.3e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 2 CGAACGTTTCG 11
|||||

RESULT 14

US-10-033-243-102/c
; Sequence 102, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133

; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 102
; LENGTH: 11
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-102

Query Match 100.0%; Score 10; DB 14; Length 11;
Best Local Similarity 100.0%; Pred. No. 7.3e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 11 CGAACGTTTCG 2
|||||

RESULT 15

US-10-176-883-103
; Sequence 103, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen
; APPLICANT: DINA, Dino
; APPLICANT: TUCK, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 103
; LENGTH: 11
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-103

Query Match 100.0%; Score 10; DB 16; Length 11;
Best Local Similarity 100.0%; Pred. No. 7.3e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 2 CGAACGTTTCG 11
|||||

RESULT 16

US-10-176-883-103/c
; Sequence 103, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen
; APPLICANT: DINA, Dino
; APPLICANT: TUCK, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSEQ for Windows Version 4.0

```
; SEQ ID NO 103
; LENGTH: 11
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-103

Query Match      100.0%; Score 10; DB 16; Length 11;
Best Local Similarity 100.0%; Pred. No. 7.3e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTTTCG 10
Db      11 CGAACGTTTCG 2

RESULT 17
US-10-177-826-103
; Sequence 103, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-II
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 103
; LENGTH: 11
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-103

Query Match      100.0%; Score 10; DB 16; Length 11;
Best Local Similarity 100.0%; Pred. No. 7.3e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTTTCG 10
Db      2 CGAACGTTTCG 11

RESULT 18
US-10-177-826-103/c
; Sequence 103, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-II
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 103

; SEQ ID NO 103
; LENGTH: 11
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-103/c

Query Match      100.0%; Score 10; DB 17; Length 11;
Best Local Similarity 100.0%; Pred. No. 7.3e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTTTCG 10
Db      2 CGAACGTTTCG 11

RESULT 20
US-10-328-578-103/c
; Sequence 103, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-III
; FILE REFERENCE: 377882002020
; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
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; PRIOR APPLICATION NUMBER: US 60/375,253
 ; PRIOR FILING DATE: 2002-04-23
 ; PRIOR APPLICATION NUMBER: US 10/177,826
 ; PRIOR FILING DATE: 2002-06-21
 ; NUMBER OF SEQ ID NOS: 152
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 103
 ; LENGTH: 11
 ; TYPE: DNA
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: Synthetic construct
 US-10-328-578-103

Query Match 100.0%; Score 10; DB 17; Length 11;
 Best Local Similarity 100.0%; Pred. No. 7.3e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 Db 11 CGAACGTTTCG 2
 |||||

RESULT 21

US-10-623-371-103
 ; Sequence 103, Application US/10623371
 ; Publication No. US20040132677A1
 ; GENERAL INFORMATION:
 ; APPLICANT: FEARON, Karen L.
 ; APPLICANT: DINA, Dino
 ; APPLICANT: TUCK, Stephen F.
 ; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
 ; TITLE OF INVENTION: METHODS OF USING THE SAME-IV
 ; FILE REFERENCE: 377882002021
 ; CURRENT APPLICATION NUMBER: US/10/623,371
 ; CURRENT FILING DATE: 2003-07-18
 ; PRIOR APPLICATION NUMBER: US 10/328,578
 ; PRIOR FILING DATE: 2002-12-23
 ; PRIOR APPLICATION NUMBER: US 10/176,883
 ; PRIOR FILING DATE: 2002-06-21
 ; PRIOR APPLICATION NUMBER: US 10/177,826
 ; PRIOR FILING DATE: 2002-06-21
 ; PRIOR APPLICATION NUMBER: US 60/299,883
 ; PRIOR FILING DATE: 2001-06-21
 ; PRIOR APPLICATION NUMBER: US 60/375,253
 ; PRIOR FILING DATE: 2002-04-23
 ; NUMBER OF SEQ ID NOS: 158
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 103
 ; LENGTH: 11
 ; TYPE: DNA
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: Synthetic construct
 US-10-623-371-103

Query Match 100.0%; Score 10; DB 19; Length 11;
 Best Local Similarity 100.0%; Pred. No. 7.3e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 Db 2 CGAACGTTTCG 11
 |||||

RESULT 22

US-10-623-371-103/c
 ; Sequence 103, Application US/10623371
 ; Publication No. US20040132677A1
 ; GENERAL INFORMATION:
 ; APPLICANT: FEARON, Karen L.
 ; APPLICANT: DINA, Dino
 ; APPLICANT: TUCK, Stephen F.

; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
 ; TITLE OF INVENTION: METHODS OF USING THE SAME-IV
 ; FILE REFERENCE: 377882002021
 ; CURRENT APPLICATION NUMBER: US/10/623,371
 ; CURRENT FILING DATE: 2003-07-18
 ; PRIOR APPLICATION NUMBER: US 10/328,578
 ; PRIOR FILING DATE: 2002-12-23
 ; PRIOR APPLICATION NUMBER: US 10/176,883
 ; PRIOR FILING DATE: 2002-06-21
 ; PRIOR APPLICATION NUMBER: US 10/177,826
 ; PRIOR FILING DATE: 2002-06-21
 ; PRIOR APPLICATION NUMBER: US 60/299,883
 ; PRIOR FILING DATE: 2001-06-21
 ; PRIOR APPLICATION NUMBER: US 60/375,253
 ; PRIOR FILING DATE: 2002-04-23
 ; NUMBER OF SEQ ID NOS: 158
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 103
 ; LENGTH: 11
 ; TYPE: DNA
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: Synthetic construct
 US-10-623-371-103

Query Match 100.0%; Score 10; DB 19; Length 11;
 Best Local Similarity 100.0%; Pred. No. 7.3e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 Db 11 CGAACGTTTCG 2
 |||||

RESULT 23

US-10-739-518-103
 ; Sequence 103, Application US/10739518
 ; Publication No. US20040136948A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Fearon, Karen L.
 ; TITLE OF INVENTION: BRANCHED IMMUNOMODULATORY COMPOUNDS AND
 ; TITLE OF INVENTION: METHODS OF USING THE SAME
 ; FILE REFERENCE: 377882003200
 ; CURRENT APPLICATION NUMBER: US/10/739,518
 ; CURRENT FILING DATE: 2003-12-17
 ; PRIOR APPLICATION NUMBER: US 60/436,406
 ; PRIOR FILING DATE: 2002-12-23
 ; NUMBER OF SEQ ID NOS: 148
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 103
 ; LENGTH: 11
 ; TYPE: DNA
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: Synthetic Construct
 US-10-739-518-103

Query Match 100.0%; Score 10; DB 19; Length 11;
 Best Local Similarity 100.0%; Pred. No. 7.3e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 Db 2 CGAACGTTTCG 11
 |||||

RESULT 24

US-10-739-518-103/c
 ; Sequence 103, Application US/10739518
 ; Publication No. US20040136948A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Fearon, Karen L.
 ; TITLE OF INVENTION: BRANCHED IMMUNOMODULATORY COMPOUNDS AND

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; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 377882003200
; CURRENT APPLICATION NUMBER: US/10/739,518
; CURRENT FILING DATE: 2003-12-17
; PRIOR APPLICATION NUMBER: US 60/436,406
; PRIOR FILING DATE: 2002-12-23
; NUMBER OF SEQ ID NOS: 148
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 103
; LENGTH: 11
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Construct
US-10-739-518-103

```

```

Query Match          100.0%; Score 10; DB 19; Length 11;
Best Local Similarity 100.0%; Pred. No. 7.3e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

Qy 1 CGAACGTTTCG 10
    |||||
Db 11 CGAACGTTTCG 2

```

RESULT 25

```

US-10-623-371-155
; Sequence 155, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: DINA, Dino
; APPLICANT: TUCK, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002021
; CURRENT APPLICATION NUMBER: US/10/623,371
; CURRENT FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US 10/328,578
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 155
; LENGTH: 12
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Construct
US-10-623-371-155

```

```

Query Match          100.0%; Score 10; DB 19; Length 12;
Best Local Similarity 100.0%; Pred. No. 7.3e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

Qy 1 CGAACGTTTCG 10
    |||||
Db 2 CGAACGTTTCG 11

```

RESULT 26

```

US-10-623-371-155/c
; Sequence 155, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.

```

```

; APPLICANT: DINA, Dino
; APPLICANT: TUCK, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002021
; CURRENT APPLICATION NUMBER: US/10/623,371
; CURRENT FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US 10/328,578
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 155
; LENGTH: 12
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Construct
US-10-623-371-155

```

```

Query Match          100.0%; Score 10; DB 19; Length 12;
Best Local Similarity 100.0%; Pred. No. 7.3e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

Qy 1 CGAACGTTTCG 10
    |||||
Db 11 CGAACGTTTCG 2

```

RESULT 27

```

US-10-739-518-135
; Sequence 135, Application US/10739518
; Publication No. US20040136948A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; TITLE OF INVENTION: BRANCHED IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882003200
; CURRENT APPLICATION NUMBER: US/10/739,518
; CURRENT FILING DATE: 2003-12-17
; PRIOR APPLICATION NUMBER: US 60/436,406
; PRIOR FILING DATE: 2002-12-23
; NUMBER OF SEQ ID NOS: 148
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 135
; LENGTH: 12
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Construct
US-10-739-518-135

```

```

Query Match          100.0%; Score 10; DB 19; Length 12;
Best Local Similarity 100.0%; Pred. No. 7.3e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

Qy 1 CGAACGTTTCG 10
    |||||
Db 2 CGAACGTTTCG 11

```

RESULT 28

```

US-10-739-518-135/c
; Sequence 135, Application US/10739518
; Publication No. US20040136948A1
; GENERAL INFORMATION:

```

; APPLICANT: Fearon, Karen L.
 ; TITLE OF INVENTION: BRANCHED IMMUNOMODULATORY COMPOUNDS AND
 ; METHODS OF USING THE SAME
 ; FILE REFERENCE: 377882003200
 ; CURRENT APPLICATION NUMBER: US/10/739,518
 ; PRIOR FILING DATE: 2003-12-17
 ; PRIOR APPLICATION NUMBER: US 60/436,406
 ; PRIOR FILING DATE: 2002-12-23
 ; NUMBER OF SEQ ID NOS: 148
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 135
 ; LENGTH: 12
 ; TYPE: DNA
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; NAME/KEY: Synthetic Construct
 ; OTHER INFORMATION: Synthetic Construct
 US-10-739-518-135

Query Match 100.0%; Score 10; DB 19; Length 12;
 Best Local Similarity 100.0%; Pred. No. 7.3e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 Db 11 CGAACGTTTCG 2

RESULT 29

US-10-952-254-51
 ; Sequence 51, Application US/10952254
 ; Publication No. US20050130911A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Krieg, Art
 ; APPLICANT: Vollmer, Joerg
 ; APPLICANT: Uhlmann, Eugen
 ; TITLE OF INVENTION: NUCLEIC ACID-LIPOPHILIC CONJUGATES
 ; FILE REFERENCE: C1037.70050US01
 ; CURRENT APPLICATION NUMBER: US/10/952,254
 ; CURRENT FILING DATE: 2004-09-27
 ; PRIOR APPLICATION NUMBER: 60/505977
 ; PRIOR FILING DATE: 2003-09-25
 ; NUMBER OF SEQ ID NOS: 116
 ; SOFTWARE: PatentIn version 3.3
 ; SEQ ID NO 51
 ; LENGTH: 12
 ; TYPE: DNA
 ; ORGANISM: Artificial sequence
 ; FEATURE:
 ; NAME/KEY: misc feature
 ; LOCATION: (12)..(12)
 ; OTHER INFORMATION: cholesterol
 US-10-952-254-51

Query Match 100.0%; Score 10; DB 22; Length 12;
 Best Local Similarity 100.0%; Pred. No. 7.3e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 Db 2 CGAACGTTTCG 11

RESULT 30

US-10-952-254-51/c
 ; Sequence 51, Application US/10952254
 ; Publication No. US20050130911A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Krieg, Art
 ; APPLICANT: Vollmer, Joerg
 ; APPLICANT: Uhlmann, Eugen
 ; TITLE OF INVENTION: NUCLEIC ACID-LIPOPHILIC CONJUGATES

; FILE REFERENCE: C1037.70050US01
 ; CURRENT APPLICATION NUMBER: US/10/952,254
 ; CURRENT FILING DATE: 2004-09-27
 ; PRIOR APPLICATION NUMBER: 60/505977
 ; PRIOR FILING DATE: 2003-09-25
 ; NUMBER OF SEQ ID NOS: 116
 ; SOFTWARE: PatentIn version 3.3
 ; SEQ ID NO 51
 ; LENGTH: 12
 ; TYPE: DNA
 ; ORGANISM: Artificial sequence
 ; FEATURE:
 ; NAME/KEY: Synthetic oligonucleotide
 ; OTHER INFORMATION: Synthetic oligonucleotide
 ; NAME/KEY: misc feature
 ; LOCATION: (12)..(12)
 ; OTHER INFORMATION: cholesterol
 US-10-952-254-51

Query Match 100.0%; Score 10; DB 22; Length 12;
 Best Local Similarity 100.0%; Pred. No. 7.3e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 Db 11 CGAACGTTTCG 2

RESULT 31

US-10-033-243-97
 ; Sequence 97, Application US/10033243
 ; Publication No. US20030049266A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Fearon, Karen L.
 ; APPLICANT: DINA, Dino
 ; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
 ; METHODS OF USING THE SAME
 ; FILE REFERENCE: 377882001800
 ; CURRENT APPLICATION NUMBER: US/10/033,243
 ; CURRENT FILING DATE: 2002-04-03
 ; PRIOR APPLICATION NUMBER: 60/258,675
 ; PRIOR FILING DATE: 2000-12-27
 ; NUMBER OF SEQ ID NOS: 133
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 97
 ; LENGTH: 13
 ; TYPE: DNA
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: Polynucleotide containing CG
 US-10-033-243-97

Query Match 100.0%; Score 10; DB 14; Length 13;
 Best Local Similarity 100.0%; Pred. No. 7.2e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 Db 4 CGAACGTTTCG 13

RESULT 32

US-10-033-243-97/c
 ; Sequence 97, Application US/10033243
 ; Publication No. US20030049266A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Fearon, Karen L.
 ; APPLICANT: DINA, Dino
 ; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
 ; METHODS OF USING THE SAME
 ; FILE REFERENCE: 377882001800
 ; CURRENT APPLICATION NUMBER: US/10/033,243
 ; CURRENT FILING DATE: 2002-04-03

```
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 97
; LENGTH: 13
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: 2
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-99

Query Match      100.0%; Score 10; DB 14; Length 13;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
   |||||
Db 13 CGAACGTTTCG 4

RESULT 33
US-10-033-243-99
; Sequence 99, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 99
; LENGTH: 13
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
; NAME/KEY: misc_feature
; LOCATION: 2
; OTHER INFORMATION: n = 5-bromocytosine
US-10-033-243-99

Query Match      100.0%; Score 10; DB 14; Length 13;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
   |||||
Db 13 CGAACGTTTCG 4

RESULT 34
US-10-033-243-99/c
; Sequence 99, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 99
; LENGTH: 13
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
; NAME/KEY: misc_feature
; LOCATION: 2
; OTHER INFORMATION: n = 5-bromocytosine
US-10-033-243-99

Query Match      100.0%; Score 10; DB 14; Length 13;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
   |||||
Db 4 CGAACGTTTCG 13

RESULT 35
US-10-739-518-139/c
; Sequence 139, Application US/10739518
; Publication No. US20040136948A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; TITLE OF INVENTION: BRANCHED IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 377882003200
; CURRENT APPLICATION NUMBER: US/10/739,518
; CURRENT FILING DATE: 2003-12-17
; PRIOR APPLICATION NUMBER: US 60/436,406
; PRIOR FILING DATE: 2002-12-23
; NUMBER OF SEQ ID NOS: 148
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 139
; LENGTH: 13
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Construct
US-10-739-518-139

Query Match      100.0%; Score 10; DB 19; Length 13;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
   |||||
Db 2 CGAACGTTTCG 11

RESULT 36
US-10-739-518-139/c
; Sequence 139, Application US/10739518
; Publication No. US20040136948A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; TITLE OF INVENTION: BRANCHED IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 377882003200
; CURRENT APPLICATION NUMBER: US/10/739,518
; CURRENT FILING DATE: 2003-12-17
; PRIOR APPLICATION NUMBER: US 60/436,406
; PRIOR FILING DATE: 2002-12-23
; NUMBER OF SEQ ID NOS: 148
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 139
; LENGTH: 13
; TYPE: DNA
; ORGANISM: Artificial Sequence
```


FEATURE:
; OTHER INFORMATION: Synthetic Construct
US-10-739-518-139

Query Match 100.0%; Score 10; DB 19; Length 13;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 11 CGAACGTTTCG 2

RESULT 37

US-10-257-017B-16007
; Sequence 16007, Application US/10257017B
; Publication No. US20040241651A1
; GENERAL INFORMATION:
; APPLICANT: Alexander Olek
; APPLICANT: Christian Piepenbrock
; APPLICANT: Kurt Berlin
; TITLE OF INVENTION: Detection of single nucleotide polymorphisms [SNPs] and cytosine
; FILE REFERENCE: E01/1193/WO
; CURRENT APPLICATION NUMBER: US/10/257,017B
; CURRENT FILING DATE: 2002-10-07
; PRIOR APPLICATION NUMBER: DE 10019173.8
; PRIOR FILING DATE: 2000-04-07
; NUMBER OF SEQ ID NOS: 382046
; SEQ ID NO 16007
; LENGTH: 13
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Oligonucleotide for detection of SNP TSC0003513

US-10-257-017B-16007

Query Match 100.0%; Score 10; DB 20; Length 13;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 2 CGAACGTTTCG 11

RESULT 38

US-10-257-017B-16007/c
; Sequence 16007, Application US/10257017B
; Publication No. US20040241651A1
; GENERAL INFORMATION:
; APPLICANT: Alexander Olek
; APPLICANT: Christian Piepenbrock
; APPLICANT: Kurt Berlin
; TITLE OF INVENTION: Detection of single nucleotide polymorphisms [SNPs] and cytosine
; FILE REFERENCE: E01/1193/WO
; CURRENT APPLICATION NUMBER: US/10/257,017B
; CURRENT FILING DATE: 2002-10-07
; PRIOR APPLICATION NUMBER: DE 10019173.8
; PRIOR FILING DATE: 2000-04-07
; NUMBER OF SEQ ID NOS: 382046
; SEQ ID NO 16007
; LENGTH: 13
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Oligonucleotide for detection of SNP TSC0003513

US-10-257-017B-16007

Query Match 100.0%; Score 10; DB 20; Length 13;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 11 CGAACGTTTCG 2

RESULT 39

US-10-257-017B-16008
; Sequence 16008, Application US/10257017B
; Publication No. US20040241651A1
; GENERAL INFORMATION:
; APPLICANT: Alexander Olek
; APPLICANT: Christian Piepenbrock
; APPLICANT: Kurt Berlin
; TITLE OF INVENTION: Detection of single nucleotide polymorphisms [SNPs] and cytosine
; FILE REFERENCE: E01/1193/WO
; CURRENT APPLICATION NUMBER: US/10/257,017B
; CURRENT FILING DATE: 2002-10-07
; PRIOR APPLICATION NUMBER: DE 10019173.8
; PRIOR FILING DATE: 2000-04-07
; NUMBER OF SEQ ID NOS: 382046
; SEQ ID NO 16008
; LENGTH: 13
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Oligonucleotide for detection of SNP TSC0003513

Query Match 100.0%; Score 10; DB 20; Length 13;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 3 CGAACGTTTCG 12

RESULT 40

US-10-257-017B-16008/c
; Sequence 16008, Application US/10257017B
; Publication No. US20040241651A1
; GENERAL INFORMATION:
; APPLICANT: Alexander Olek
; APPLICANT: Christian Piepenbrock
; APPLICANT: Kurt Berlin
; TITLE OF INVENTION: Detection of single nucleotide polymorphisms [SNPs] and cytosine
; FILE REFERENCE: E01/1193/WO
; CURRENT APPLICATION NUMBER: US/10/257,017B
; CURRENT FILING DATE: 2002-10-07
; PRIOR APPLICATION NUMBER: DE 10019173.8
; PRIOR FILING DATE: 2000-04-07
; NUMBER OF SEQ ID NOS: 382046
; SEQ ID NO 16008
; LENGTH: 13
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Oligonucleotide for detection of SNP TSC0003513

Query Match 100.0%; Score 10; DB 20; Length 13;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 12 CGAACGTTTCG 3

RESULT 41

```

US-10-033-243--98
; Sequence 98, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; METHOD OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 98
; LENGTH: 14
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243--98

```

| | | | | |
|-----------------------|-----------------|--------------------|-----------|------------|
| Query Match | 100.0%; | Score 10; | DB 14; | Length 14; |
| Best Local Similarity | 100.0%; | Pred. No. 7.2e+03; | | |
| Matches 10; | Conservative 0; | Mismatches 0; | Indels 0; | Gaps 0; |

Qy 1 CGAACGTTTCG 10
Db 5 CGAACGTTTCG 14

```

RESULT 42
US-10-033-243-98/c
; Sequence 98, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FASTSEQ for Windows Version 4.0
; SEQ ID NO 98
; LENGTH: 14
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-98

```

| Query Match | 100.0% | Score 10; | DB 14; | Length 14; |
|-----------------------|--------------|-----------|------------|------------|
| Best Local Similarity | 100.0% | Pred. No. | 7.2e+03; | |
| Matches 10; | Conservative | 0; | Mismatches | 0; |
| | Indels | 0; | Gaps | 0; |

Qy 1 CGAACGTTTCG 10
Db 14 CGAACGTTTCG 5

RESULT 43
US-10-176-883-98
: Sequence 98 Application US/10176883
: Publication No US2003015731A1
: GENERAL INFORMATION:
: APPLICANT: Fearon, Karen
: APPLICANT: Dino, Dino
: APPLICANT: Tuck, Stephen

```

; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
;
; TITLE OF INVENTION: METHODS OF USING THE SAME-1
;
; FILE REFERENCE: 377882002000
;
; CURRENT APPLICATION NUMBER: US/10/176,883
;
; CURRENT FILING DATE: 2002-06-21
;
; PRIOR APPLICATION NUMBER: 60/299,883
;
; PRIOR FILING DATE: 2001-06-21
;
; PRIOR APPLICATION NUMBER: 60/375,253
;
; PRIOR FILING DATE: 2002-04-23
;
; NUMBER OF SEQ ID NOS: 141
;
; SOFTWARE: FastSeq for Windows Version 4.0
;
; SEQ ID NO 98
;
; LENGTH: 14
;
; TYPE: DNA
;
; ORGANISM: Artificial Sequence
;
; FEATURE:
;
; OTHER INFORMATION: Synthetic construct
;
; US-10-176-883-98

```

Query Match 100.0%; Score 10; DB 16; Length 14;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels

QY 1 CGAACGTTTCG 10
|||
Db 5 CGAACGTTTCG 14

```

RESULT 44
US-10-176-883-98/c
; Sequence 98, Application US/10176893
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-I
; FILE REFERENCE: 377862002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 98
; LENGTH: 14
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-98

```

Query Match 100.0%; Score 10; DB 16; Length 14;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10: Conservative 0; Mismatches 0; Indels

Qy 1 CGAACGTTCTG 10
Db 14 CGAACGTTCTG 5

RESULT 45
US-10-176-883-104
; Sequence 104, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND

; TITLE OF INVENTION: METHODS OF USING THE SAME-I

; FILE REFERENCE: 37782002000

; CURRENT APPLICATION NUMBER: US/10/176,883

; CURRENT FILING DATE: 2002-06-21

; PRIOR APPLICATION NUMBER: 60/299,883

; PRIOR FILING DATE: 2001-06-21

; PRIOR APPLICATION NUMBER: 60/375,253

; PRIOR FILING DATE: 2002-04-23

; NUMBER OF SEQ ID NOS: 141

; SOFTWARE: FastSeq for Windows Version 4.0

; SEQ ID NO 104

; LENGTH: 14

; TYPE: DNA

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Synthetic construct

US-10-176-883-104

Query Match 100.0%; Score 10; DB 16; Length 14;

Best Local Similarity 100.0%; Pred. No. 7.2e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

Db 5 CGAACGTTTCG 14

RESULT 46

US-10-176-883-104/c

; Sequence 104, Application US/10176883

; Publication No. US20030175731A1

; GENERAL INFORMATION:

; APPLICANT: Fearon, Karen

; APPLICANT: Dina, Dino

; APPLICANT: Tuck, Stephen

; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND

; FILE REFERENCE: 37782002000

; CURRENT APPLICATION NUMBER: US/10/176,883

; CURRENT FILING DATE: 2002-06-21

; PRIOR APPLICATION NUMBER: 60/299,883

; PRIOR FILING DATE: 2001-06-21

; PRIOR APPLICATION NUMBER: 60/375,253

; PRIOR FILING DATE: 2002-04-23

; NUMBER OF SEQ ID NOS: 141

; SOFTWARE: FastSeq for Windows Version 4.0

; SEQ ID NO 104

; LENGTH: 14

; TYPE: DNA

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Synthetic construct

US-10-176-883-104

Query Match 100.0%; Score 10; DB 16; Length 14;

Best Local Similarity 100.0%; Pred. No. 7.2e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

Db 14 CGAACGTTTCG 5

RESULT 47

US-10-177-826-98

; Sequence 98, Application US/10177826

; Publication No. US20030199466A1

; GENERAL INFORMATION:

; APPLICANT: Fearon, Karen

; APPLICANT: Dina, Dino

; APPLICANT: Tuck, Stephen

; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND

; FILE REFERENCE: 37782002001

; CURRENT APPLICATION NUMBER: US/10/177,826

; CURRENT FILING DATE: 2002-06-21

; PRIOR APPLICATION NUMBER: 60/299,883

; PRIOR FILING DATE: 2001-06-21

; PRIOR APPLICATION NUMBER: 60/375,253

; PRIOR FILING DATE: 2002-04-23

; NUMBER OF SEQ ID NOS: 141

; SOFTWARE: FastSeq for Windows Version 4.0

; SEQ ID NO 104

; LENGTH: 14

; TYPE: DNA

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Synthetic construct

US-10-177-826-98

; FILE REFERENCE: 37782002001

; CURRENT APPLICATION NUMBER: US/10/177,826

; CURRENT FILING DATE: 2002-06-21

; PRIOR APPLICATION NUMBER: 60/299,883

; PRIOR FILING DATE: 2001-06-21

; PRIOR APPLICATION NUMBER: 60/375,253

; PRIOR FILING DATE: 2002-04-23

; NUMBER OF SEQ ID NOS: 141

; SOFTWARE: FastSeq for Windows Version 4.0

; SEQ ID NO 98

; LENGTH: 14

; TYPE: DNA

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Synthetic construct

US-10-177-826-98

Query Match 100.0%; Score 10; DB 16; Length 14;

Best Local Similarity 100.0%; Pred. No. 7.2e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

Db 5 CGAACGTTTCG 14

RESULT 48

US-10-177-826-98/c

; Sequence 98, Application US/10177826

; Publication No. US20030199466A1

; GENERAL INFORMATION:

; APPLICANT: Fearon, Karen

; APPLICANT: Dina, Dino

; APPLICANT: Tuck, Stephen

; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND

; FILE REFERENCE: 37782002001

; CURRENT APPLICATION NUMBER: US/10/177,826

; CURRENT FILING DATE: 2002-06-21

; PRIOR APPLICATION NUMBER: 60/299,883

; PRIOR FILING DATE: 2001-06-21

; PRIOR APPLICATION NUMBER: 60/375,253

; PRIOR FILING DATE: 2002-04-23

; NUMBER OF SEQ ID NOS: 141

; SOFTWARE: FastSeq for Windows Version 4.0

; SEQ ID NO 98

; LENGTH: 14

; TYPE: DNA

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Synthetic construct

US-10-177-826-98

Query Match 100.0%; Score 10; DB 16; Length 14;

Best Local Similarity 100.0%; Pred. No. 7.2e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

Db 14 CGAACGTTTCG 5

RESULT 49

US-10-177-826-104

; Sequence 104, Application US/10177826

; Publication No. US20030199466A1

; GENERAL INFORMATION:

; APPLICANT: Fearon, Karen

; APPLICANT: Dina, Dino

; APPLICANT: Tuck, Stephen

; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND

; FILE REFERENCE: 37782002001

; CURRENT APPLICATION NUMBER: US/10/177,826

; CURRENT FILING DATE: 2002-06-21

; PRIOR APPLICATION NUMBER: 60/299,883

; PRIOR FILING DATE: 2001-06-21

; PRIOR APPLICATION NUMBER: 60/375,253

; PRIOR FILING DATE: 2002-04-23

; NUMBER OF SEQ ID NOS: 141

; SOFTWARE: FastSeq for Windows Version 4.0

; SEQ ID NO 98

; LENGTH: 14

; TYPE: DNA

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Synthetic construct

US-10-177-826-98

; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 104
; LENGTH: 14
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-104

Query Match 100.0%; Score 10; DB 16; Length 14;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 5 CGAACGTTTCG 14
|||||

RESULT 50
US-10-177-826-104/c
; Sequence 104, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 37788200201
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 104
; LENGTH: 14
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-104

Query Match 100.0%; Score 10; DB 16; Length 14;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 14 CGAACGTTTCG 5
|||||

RESULT 51
US-10-328-578-98
; Sequence 98, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002020
; CURRENT APPLICATION NUMBER: US/10/328,578

; CURRENT FILING DATE: 2003-05-16
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; PRIOR APPLICATION NUMBER: US 10/177,826
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 98
; LENGTH: 14
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-98

Query Match 100.0%; Score 10; DB 17; Length 14;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 5 CGAACGTTTCG 14
|||||

RESULT 52
US-10-328-578-98/c
; Sequence 98, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002020
; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; PRIOR APPLICATION NUMBER: US 10/177,826
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 98
; LENGTH: 14
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-98

Query Match 100.0%; Score 10; DB 17; Length 14;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 14 CGAACGTTTCG 5
|||||

RESULT 53
US-10-623-371-98
; Sequence 98, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:

APPLICANT: FEARON, Karen L.
APPLICANT: DINA, Dino
APPLICANT: TUCK, Stephen F.
TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
METHODS OF USING THE SAME-IV
FILE REFERENCE: 377882002021
CURRENT APPLICATION NUMBER: US/10/623,371
CURRENT FILING DATE: 2003-07-18
PRIOR APPLICATION NUMBER: US 10/328,578
PRIOR FILING DATE: 2002-12-23
PRIOR APPLICATION NUMBER: US 10/176,883
PRIOR FILING DATE: 2002-06-21
PRIOR APPLICATION NUMBER: US 10/177,826
PRIOR FILING DATE: 2002-06-21
PRIOR APPLICATION NUMBER: US 60/299,883
PRIOR FILING DATE: 2001-06-21
PRIOR APPLICATION NUMBER: US 60/375,253
PRIOR FILING DATE: 2002-04-23
NUMBER OF SEQ ID NOS: 158
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 98
LENGTH: 14
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Synthetic construct
US-10-623-371-98

Query Match 100.0%; Score 10; DB 19; Length 14;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
|||||
DB 5 CGAACGTTTCG 14

RESULT 54
US-10-623-371-98/c
Sequence 98, Application US/10623371
Publication No. US20040132677A1
GENERAL INFORMATION:
APPLICANT: FEARON, Karen L.
APPLICANT: DINA, Dino
TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
METHODS OF USING THE SAME-IV
FILE REFERENCE: 377882002021
CURRENT APPLICATION NUMBER: US/10/623,371
CURRENT FILING DATE: 2003-07-18
PRIOR APPLICATION NUMBER: US 10/328,578
PRIOR FILING DATE: 2002-12-23
PRIOR APPLICATION NUMBER: US 10/176,883
PRIOR FILING DATE: 2002-06-21
PRIOR APPLICATION NUMBER: US 10/177,826
PRIOR FILING DATE: 2002-06-21
PRIOR APPLICATION NUMBER: US 60/299,883
PRIOR FILING DATE: 2001-06-21
PRIOR APPLICATION NUMBER: US 60/375,253
PRIOR FILING DATE: 2002-04-23
NUMBER OF SEQ ID NOS: 158
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 98
LENGTH: 14
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Synthetic construct
US-10-623-371-98

Query Match 100.0%; Score 10; DB 19; Length 14;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
|||||
DB 14 CGAACGTTTCG 5

RESULT 55
US-10-739-518-98
Sequence 98, Application US/10739518
Publication No. US20040136948A1
GENERAL INFORMATION:
APPLICANT: Fearon, Karen L.
TITLE OF INVENTION: BRANCHED IMMUNOMODULATORY COMPOUNDS AND
METHODS OF USING THE SAME
FILE REFERENCE: 377882003200
CURRENT APPLICATION NUMBER: US/10/739,518
CURRENT FILING DATE: 2003-12-17
PRIOR APPLICATION NUMBER: US 60/436,406
PRIOR FILING DATE: 2002-12-23
NUMBER OF SEQ ID NOS: 148
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 98
LENGTH: 14
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Synthetic Construct
US-10-739-518-98

Query Match 100.0%; Score 10; DB 19; Length 14;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
|||||
DB 5 CGAACGTTTCG 14

RESULT 56
US-10-739-518-98/c
Sequence 98, Application US/10739518
Publication No. US20040136948A1
GENERAL INFORMATION:
APPLICANT: Fearon, Karen L.
TITLE OF INVENTION: BRANCHED IMMUNOMODULATORY COMPOUNDS AND
METHODS OF USING THE SAME
FILE REFERENCE: 377882003200
CURRENT APPLICATION NUMBER: US/10/739,518
CURRENT FILING DATE: 2003-12-17
PRIOR APPLICATION NUMBER: US 60/436,406
PRIOR FILING DATE: 2002-12-23
NUMBER OF SEQ ID NOS: 148
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 98
LENGTH: 14
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Synthetic Construct
US-10-739-518-98

Query Match 100.0%; Score 10; DB 19; Length 14;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
|||||
DB 14 CGAACGTTTCG 5

RESULT 57
US-10-739-518-104
Sequence 104, Application US/10739518

```
; Publication No. US20040136948A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; TITLE OF INVENTION: BRANCHED IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 377882003200
; CURRENT FILING DATE: 2003-12-17
; PRIOR APPLICATION NUMBER: US 10/739,518
; PRIOR FILING DATE: 2002-12-23
; NUMBER OF SEQ ID NOS: 148
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 104
; LENGTH: 14
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Construct
US-10-739-518-104.

Query Match          100.0%; Score 10; DB 19; Length 14;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 CGAACGTTTCG 10
        |||||
Db       5 CGAACGTTTCG 14

RESULT 58
US-10-739-518-104/c
; Sequence 104, Application US/10739518
; Publication No. US20040136948A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; TITLE OF INVENTION: BRANCHED IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 377882003200
; CURRENT APPLICATION NUMBER: US/10/739,518
; CURRENT FILING DATE: 2003-12-17
; PRIOR APPLICATION NUMBER: US 60/436,406
; PRIOR FILING DATE: 2002-12-23
; NUMBER OF SEQ ID NOS: 148
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 104
; LENGTH: 14
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Construct
US-10-739-518-104

Query Match          100.0%; Score 10; DB 19; Length 14;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 CGAACGTTTCG 10
        |||||
Db       14 CGAACGTTTCG 5

RESULT 59
US-10-739-518-136
; Sequence 136, Application US/10739518
; Publication No. US20040136948A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; TITLE OF INVENTION: BRANCHED IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 377882003200
; CURRENT APPLICATION NUMBER: US/10/739,518
; CURRENT FILING DATE: 2003-12-17
; PRIOR APPLICATION NUMBER: US 60/436,406
```

```
; PRIOR FILING DATE: 2002-12-23
; NUMBER OF SEQ ID NOS: 148
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 136
; LENGTH: 14
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Construct
US-10-739-518-136

Query Match          100.0%; Score 10; DB 19; Length 14;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 CGAACGTTTCG 10
        |||||
Db       4 CGAACGTTTCG 13

RESULT 60
US-10-739-518-136/c
; Sequence 136, Application US/10739518
; Publication No. US20040136948A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; TITLE OF INVENTION: BRANCHED IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 377882003200
; CURRENT APPLICATION NUMBER: US/10/739,518
; CURRENT FILING DATE: 2003-12-17
; PRIOR APPLICATION NUMBER: US 60/436,406
; PRIOR FILING DATE: 2002-12-23
; NUMBER OF SEQ ID NOS: 148
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 136
; LENGTH: 14
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Construct
US-10-739-518-136

Query Match          100.0%; Score 10; DB 19; Length 14;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 CGAACGTTTCG 10
        |||||
Db       13 CGAACGTTTCG 4

RESULT 61
US-10-033-243-11
; Sequence 11, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 16
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
```

; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-11

Query Match 100.0%; Score 10; DB 14; Length 16;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 5 CGAACGTTTCG 14
|||||

RESULT 62

US-10-033-243-11/c
; Sequence 11, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/256,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 16
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-11

Query Match 100.0%; Score 10; DB 14; Length 16;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 14 CGAACGTTTCG 5
|||||

RESULT 63

US-10-176-883-33
; Sequence 33, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-I
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 33
; LENGTH: 16
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-33

Query Match 100.0%; Score 10; DB 16; Length 16;

Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 5 CGAACGTTTCG 14
|||||

RESULT 64

US-10-176-883-33/c
; Sequence 33, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-I
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 33
; LENGTH: 16
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-33

Query Match 100.0%; Score 10; DB 16; Length 16;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 14 CGAACGTTTCG 5
|||||

RESULT 65

US-10-177-826-33
; Sequence 33, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-II
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 33
; LENGTH: 16
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-33

Query Match 100.0%; Score 10; DB 16; Length 16;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 5 CGAACGTTTCG 14

RESULT 66

US-10-177-826-33/c
; Sequence 33, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-II
; FILE REFERENCE: 37788200201
; CURRENT FILING DATE: 2002-06-21
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 33
; LENGTH: 16
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-33

Query Match 100.0%; Score 10; DB 16; Length 16;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 14 CGAACGTTTCG 5

RESULT 67

US-10-328-578-33
; Sequence 33, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-II
; FILE REFERENCE: 377882002020
; CURRENT FILING DATE: 2003-05-16
; PRIOR FILING DATE: 2003-05-16
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 33
; LENGTH: 16
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-33

Query Match 100.0%; Score 10; DB 17; Length 16;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 5 CGAACGTTTCG 14

RESULT 68

US-10-328-578-33/c
; Sequence 33, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-III
; FILE REFERENCE: 377882002020
; CURRENT FILING DATE: 2003-05-16
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 33
; LENGTH: 16
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-33

Query Match 100.0%; Score 10; DB 17; Length 16;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 14 CGAACGTTTCG 5

RESULT 69

US-10-623-371-33
; Sequence 33, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-IV
; FILE REFERENCE: 377882002021
; CURRENT FILING DATE: 2003-07-18
; PRIOR FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US 10/328,578
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23

; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 33
; LENGTH: 16
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-623-371-33

Query Match 100.0%; Score 10; DB 19; Length 16;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
|||
Db 5 CGAACGTTTCG 14

RESULT 70

US-10-623-371-33/c
; Sequence 33, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-IV
; FILE REFERENCE: 377882002021
; CURRENT APPLICATION NUMBER: US/10/623,371
; CURRENT FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US 10/328,578
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 33
; LENGTH: 16
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-623-371-33

Query Match 100.0%; Score 10; DB 19; Length 16;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
|||
Db 14 CGAACGTTTCG 5

RESULT 71

US-10-739-518-33
; Sequence 33, Application US/10739518
; Publication No. US20040136948A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; TITLE OF INVENTION: BRANCHED IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 377882003200
; CURRENT APPLICATION NUMBER: US/10/739,518
; CURRENT FILING DATE: 2003-12-17
; PRIOR APPLICATION NUMBER: US 60/436,406

; PRIOR FILING DATE: 2002-12-23
; NUMBER OF SEQ ID NOS: 148
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 33
; LENGTH: 16
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Construct
US-10-739-518-33

Query Match 100.0%; Score 10; DB 19; Length 16;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
|||
Db 5 CGAACGTTTCG 14

RESULT 72

US-10-739-518-33/c
; Sequence 33, Application US/10739518
; Publication No. US20040136948A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; TITLE OF INVENTION: BRANCHED IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 377882003200
; CURRENT APPLICATION NUMBER: US/10/739,518
; CURRENT FILING DATE: 2003-12-17
; PRIOR APPLICATION NUMBER: US 60/436,406
; PRIOR FILING DATE: 2002-12-23
; NUMBER OF SEQ ID NOS: 148
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 33
; LENGTH: 16
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Construct
US-10-739-518-33

Query Match 100.0%; Score 10; DB 19; Length 16;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
|||
Db 14 CGAACGTTTCG 5

RESULT 73

US-10-623-371-156
; Sequence 156, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-IV
; FILE REFERENCE: 377882002021
; CURRENT APPLICATION NUMBER: US/10/623,371
; CURRENT FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US 10/328,578
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21

; PRIOR APPLICATION NUMBER: US 60/375,253
; CURRENT FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 156
; LENGTH: 17
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Construct
US-10-623-371-156

Query Match 100.0%; Score 10; DB 19; Length 17;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTG 10
|||
Db 6 CGAACGTTG 15

RESULT 74
US-10-623-371-156/c
; Sequence 156, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dina
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-IV
; FILE REFERENCE: 37782002021
; CURRENT APPLICATION NUMBER: US/10/623,371
; CURRENT FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US 10/328,578
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 156
; LENGTH: 17
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Construct
US-10-623-371-156

Query Match 100.0%; Score 10; DB 19; Length 17;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTG 10
|||
Db 15 CGAACGTTG 6

RESULT 75
US-10-033-243-14
; Sequence 14, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dina
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 37782001800

; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 14
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-14

Query Match 100.0%; Score 10; DB 14; Length 18;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTG 10
|||
Db 4 CGAACGTTG 13

RESULT 76
US-10-033-243-14/c
; Sequence 14, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dina
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 37782001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 14
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-14

Query Match 100.0%; Score 10; DB 14; Length 18;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTG 10
|||
Db 13 CGAACGTTG 4

RESULT 77
US-10-176-883-36
; Sequence 36, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dina
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-I
; FILE REFERENCE: 37782002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23

```
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 36
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-36

Query Match      100.0%; Score 10; DB 16; Length 18;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 4 CGAACGTTTCG 13

RESULT 78
US-10-176-883-36/c
; Sequence 36, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-I
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 36
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-36

Query Match      100.0%; Score 10; DB 16; Length 18;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 13 CGAACGTTTCG 4

RESULT 79
US-10-177-826-36
; Sequence 36, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-II
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 36
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-36

Query Match      100.0%; Score 10; DB 16; Length 18;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 13 CGAACGTTTCG 4

RESULT 80
US-10-177-826-36/c
; Sequence 36, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-II
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 36
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-36

Query Match      100.0%; Score 10; DB 16; Length 18;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 13 CGAACGTTTCG 4

RESULT 81
US-10-328-578-36
; Sequence 36, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-III
; FILE REFERENCE: 377882002020
; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
```

; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 36
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-36

Query Match 100.0%; Score 10; DB 17; Length 18;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 4 CGAACGTTTCG 13
|||||

RESULT 82
US-10-328-578-36/c
; Sequence 36, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-III
; FILE REFERENCE: 377882002020
; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 36
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-36

Query Match 100.0%; Score 10; DB 17; Length 18;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 13 CGAACGTTTCG 4
|||||

RESULT 83
US-10-623-371-36
; Sequence 36, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-IV
; FILE REFERENCE: 377882002021
; CURRENT APPLICATION NUMBER: US/10/623,371

; CURRENT FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US 10/328,578
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 36
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-623-371-36

Query Match 100.0%; Score 10; DB 19; Length 18;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 4 CGAACGTTTCG 13
|||||

RESULT 84
US-10-623-371-36/c
; Sequence 36, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-IV
; FILE REFERENCE: 377882002021
; CURRENT APPLICATION NUMBER: US/10/623,371
; CURRENT FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US 10/328,578
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 36
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-623-371-36

Query Match 100.0%; Score 10; DB 19; Length 18;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 13 CGAACGTTTCG 4
|||||

RESULT 85

US-10-739-518-36
; Sequence 36, Application US/10739518
; Publication No. US20040136948A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; TITLE OF INVENTION: BRANCHED IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 37782003200
; CURRENT APPLICATION NUMBER: US/10/739,518
; CURRENT FILING DATE: 2003-12-17
; PRIOR APPLICATION NUMBER: US 60/436,406
; PRIOR FILING DATE: 2002-12-23
; NUMBER OF SEQ ID NOS: 148
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 36
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Construct
US-10-739-518-36

Query Match 100.0%; Score 10; DB 19; Length 18;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 4 CGAACGTTTCG 13

RESULT 86

US-10-739-518-36/c
; Sequence 36, Application US/10739518
; Publication No. US20040136948A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.

; TITLE OF INVENTION: BRANCHED IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 37782003200
; CURRENT APPLICATION NUMBER: US/10/739,518
; CURRENT FILING DATE: 2003-12-17
; PRIOR APPLICATION NUMBER: US 60/436,406
; PRIOR FILING DATE: 2002-12-23
; NUMBER OF SEQ ID NOS: 148
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 36
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Construct
US-10-739-518-36

Query Match 100.0%; Score 10; DB 19; Length 18;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 13 CGAACGTTTCG 4

RESULT 87

US-09-927-422A-16
; Sequence 16, Application US/09927422A
; Publication No. US20030022852A1
; GENERAL INFORMATION:
; APPLICANT: Van Nest, Gary
; APPLICANT: Tuck, Stephen
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; TITLE OF INVENTION: BIODEGRADABLE IMMUNOMODULATORY

; TITLE OF INVENTION: FORMULATIONS AND METHODS FOR USE THEREOF
; FILE REFERENCE: 37782001420
; CURRENT APPLICATION NUMBER: US/09/927,422A
; CURRENT FILING DATE: 2001-08-10
; PRIOR APPLICATION NUMBER: U.S. 09/802,359
; PRIOR FILING DATE: 2001-03-09
; PRIOR APPLICATION NUMBER: U.S. 60/188,30
; PRIOR FILING DATE: 2000-03-10
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 16
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-09-927-422A-16

Query Match 100.0%; Score 10; DB 10; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 5 CGAACGTTTCG 14

RESULT 88

US-09-927-422A-16/c
; Sequence 16, Application US/09927422A
; Publication No. US20030022852A1
; GENERAL INFORMATION:
; APPLICANT: Van Nest, Gary
; APPLICANT: Tuck, Stephen
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino

; TITLE OF INVENTION: BIODEGRADABLE IMMUNOMODULATORY
; FILE REFERENCE: 37782001420
; CURRENT APPLICATION NUMBER: US/09/927,422A
; CURRENT FILING DATE: 2001-08-10
; PRIOR APPLICATION NUMBER: U.S. 09/802,359
; PRIOR FILING DATE: 2001-03-09
; PRIOR APPLICATION NUMBER: U.S. 60/188,30
; PRIOR FILING DATE: 2000-03-10
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 16
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-09-927-422A-16

Query Match 100.0%; Score 10; DB 10; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 14 CGAACGTTTCG 5

RESULT 89

US-10-033-243-19
; Sequence 19, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; TITLE OF INVENTION: METHODS OF USING THE SAME

```
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; PRIOR FILING DATE: 2002-04-03
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 41
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-19

Query Match      100.0%; Score 10; DB 14; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 5 CGAACGTTTCG 14

RESULT 90
US-10-033-243-19/c
; Sequence 19, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; PRIOR FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 19
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-19

Query Match      100.0%; Score 10; DB 14; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 5 CGAACGTTTCG 14

RESULT 91
US-10-176-883-41
; Sequence 41, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-I
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
```

```
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 41
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-41

Query Match      100.0%; Score 10; DB 16; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 5 CGAACGTTTCG 14

RESULT 92
US-10-176-883-41/c
; Sequence 41, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-I
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 41
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-41

Query Match      100.0%; Score 10; DB 16; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 14 CGAACGTTTCG 5

RESULT 93
US-10-177-826-41
; Sequence 41, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-II
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
```

```
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 41
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-41

Query Match      100.0%; Score 10; DB 16; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 5 CGAACGTTTCG 14

RESULT 94
US-10-177-826-41/c
; Sequence 41, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 41
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-41

Query Match      100.0%; Score 10; DB 16; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 5 CGAACGTTTCG 14

RESULT 95
US-10-328-578-41
; Sequence 41, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002020
; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 41
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-41

Query Match      100.0%; Score 10; DB 16; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 14 CGAACGTTTCG 5

RESULT 96
US-10-328-578-41/c
; Sequence 41, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002020
; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 41
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-41

Query Match      100.0%; Score 10; DB 17; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 14 CGAACGTTTCG 5

RESULT 97
US-10-623-371-41
; Sequence 41, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002021
```

```
; PRIOR FILING DATE: 2002-04-23
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 41
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-41

Query Match      100.0%; Score 10; DB 17; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 5 CGAACGTTTCG 14

RESULT 96
US-10-328-578-41/c
; Sequence 41, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002020
; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 41
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-41

Query Match      100.0%; Score 10; DB 17; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 14 CGAACGTTTCG 5

RESULT 97
US-10-623-371-41
; Sequence 41, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002021
```

```
; CURRENT APPLICATION NUMBER: US/10/623,371
; CURRENT FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US 10/328,578
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 41
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-623-371-41
```

```
Query Match 100.0%; Score 10; DB 19; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 1 CGAACGTTTCG 10
Db 5 CGAACGTTTCG 14
|||||
```

RESULT 98

```
US-10-623-371-41/c
; Sequence 41, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-IV
; FILE REFERENCE: 377882002021
; CURRENT APPLICATION NUMBER: US/10/623,371
; CURRENT FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US 10/328,578
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 41
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-623-371-41
```

```
Query Match 100.0%; Score 10; DB 19; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 1 CGAACGTTTCG 10
Db 14 CGAACGTTTCG 5
|||||
```

RESULT 99

```
US-10-739-518-41
; Sequence 41, Application US/10739518
; Publication No. US20040136948A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; TITLE OF INVENTION: BRANCHED IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882003200
; CURRENT APPLICATION NUMBER: US/10/739,518
; CURRENT FILING DATE: 2003-12-17
; PRIOR APPLICATION NUMBER: US 60/436,406
; PRIOR FILING DATE: 2002-12-23
; NUMBER OF SEQ ID NOS: 148
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 41
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Construct
US-10-739-518-41
```

```
Query Match 100.0%; Score 10; DB 19; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 1 CGAACGTTTCG 10
Db 5 CGAACGTTTCG 14
|||||
```

RESULT 100

```
US-10-739-518-41/c
; Sequence 41, Application US/10739518
; Publication No. US20040136948A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; TITLE OF INVENTION: BRANCHED IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 377882003200
; CURRENT APPLICATION NUMBER: US/10/739,518
; CURRENT FILING DATE: 2003-12-17
; PRIOR APPLICATION NUMBER: US 60/436,406
; PRIOR FILING DATE: 2002-12-23
; NUMBER OF SEQ ID NOS: 148
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 41
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Construct
US-10-739-518-41
```

```
Query Match 100.0%; Score 10; DB 19; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 1 CGAACGTTTCG 10
Db 14 CGAACGTTTCG 5
|||||
```

```
Search completed: June 30, 2005, 03:50:47
Job time : 289.5 secs
```


GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

Run on: June 29, 2005, 23:58:44 ; Search time 70.5 Seconds
(without alignments)
232.096 Million cell updates/sec

Title: US-10-033-243-77

Perfect score: 10

Sequence: 1 cgaacttgg 10

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 1202784 seqs, 818138359 residues

Total number of hits satisfying chosen parameters: 2405568

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 100 summaries

Database :

Issued Patents NA:*

1: /cgn2_6/ptodata/1/ina/5A COMB.seq.*

2: /cgn2_6/ptodata/1/ina/5B COMB.seq.*

3: /cgn2_6/ptodata/1/ina/6A COMB.seq.*

4: /cgn2_6/ptodata/1/ina/6B COMB.seq.*

5: /cgn2_6/ptodata/1/ina/PTUS COMB.seq.*

6: /cgn2_6/ptodata/1/ina/backfiles1.seq.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | Query Match | Length | ID | Description |
|------------|-------|-------------|--------|----|---------------------|
| 1 | 10 | 100.0 | 22 | 2 | US-08-882-704A-18 |
| 2 | 10 | 100.0 | 22 | 2 | US-08-882-704A-18 |
| 3 | 10 | 100.0 | 22 | 3 | US-09-151-957-18 |
| 4 | 10 | 100.0 | 22 | 3 | US-09-151-957-18 |
| 5 | 10 | 100.0 | 48 | 2 | US-08-882-704A-16 |
| 6 | 10 | 100.0 | 48 | 2 | US-08-882-704A-16 |
| 7 | 10 | 100.0 | 48 | 3 | US-09-151-957-16 |
| 8 | 10 | 100.0 | 48 | 3 | US-09-151-957-16 |
| 9 | 10 | 100.0 | 71 | 3 | US-08-633-768A-12 |
| 10 | 10 | 100.0 | 71 | 3 | US-08-633-768A-12 |
| 11 | 10 | 100.0 | 71 | 4 | US-09-280-197-22 |
| 12 | 10 | 100.0 | 71 | 4 | US-09-280-197-22 |
| 13 | 10 | 100.0 | 77 | 1 | US-08-399-412A-58 |
| 14 | 10 | 100.0 | 77 | 1 | US-08-399-412A-58 |
| 15 | 10 | 100.0 | 89 | 4 | US-09-270-767-31109 |
| 16 | 10 | 100.0 | 89 | 4 | US-09-270-767-31109 |
| 17 | 10 | 100.0 | 160 | 3 | US-08-633-768A-14 |
| 18 | 10 | 100.0 | 160 | 3 | US-08-633-768A-14 |
| 19 | 10 | 100.0 | 160 | 4 | US-09-280-197-24 |
| 20 | 10 | 100.0 | 160 | 4 | US-09-280-197-24 |
| 21 | 10 | 100.0 | 284 | 4 | US-09-313-294A-5372 |
| 22 | 10 | 100.0 | 284 | 4 | US-09-313-294A-5372 |
| 23 | 10 | 100.0 | 288 | 4 | US-09-252-991A-69 |
| 24 | 10 | 100.0 | 288 | 4 | US-09-252-991A-69 |
| 25 | 10 | 100.0 | 299 | 4 | US-09-902-540-1757 |
| 26 | 10 | 100.0 | 299 | 4 | US-09-902-540-1757 |
| 27 | 10 | 100.0 | 321 | 3 | US-09-240-274-197 |

| | | | | | |
|-----|---|----------------------|----|-------|-------------------|
| 321 | 3 | US-09-240-274-197 | 10 | 100.0 | Sequence 137, App |
| 339 | 4 | US-09-627-896B-26 | 10 | 100.0 | Sequence 26, Appl |
| 339 | 4 | US-09-627-896B-26 | 10 | 100.0 | Sequence 26, Appl |
| 372 | 4 | US-09-328-352-1 | 10 | 100.0 | Sequence 1, Appli |
| 372 | 4 | US-09-328-352-1 | 10 | 100.0 | Sequence 1, Appli |
| 378 | 4 | US-09-252-991A-5959 | 10 | 100.0 | Sequence 559, Ap |
| 378 | 4 | US-09-252-991A-5959 | 10 | 100.0 | Sequence 559, Ap |
| 390 | 2 | US-08-882-704A-3 | 10 | 100.0 | Sequence 3, Appli |
| 390 | 2 | US-08-882-704A-3 | 10 | 100.0 | Sequence 3, Appli |
| 390 | 2 | US-09-151-957-3 | 10 | 100.0 | Sequence 3, Appli |
| 390 | 2 | US-09-151-957-3 | 10 | 100.0 | Sequence 3, Appli |
| 390 | 3 | US-09-513-999C-1579 | 10 | 100.0 | Sequence 1579, Ap |
| 390 | 3 | US-09-513-999C-1579 | 10 | 100.0 | Sequence 1579, Ap |
| 406 | 3 | US-09-060-756-563 | 10 | 100.0 | Sequence 563, App |
| 406 | 3 | US-09-060-756-563 | 10 | 100.0 | Sequence 563, App |
| 406 | 4 | US-09-670-314-563 | 10 | 100.0 | Sequence 563, App |
| 406 | 4 | US-09-670-314-563 | 10 | 100.0 | Sequence 563, App |
| 480 | 4 | US-09-107-433-1794 | 10 | 100.0 | Sequence 1794, Ap |
| 480 | 4 | US-09-107-433-1794 | 10 | 100.0 | Sequence 1794, Ap |
| 508 | 4 | US-09-270-767-30406 | 10 | 100.0 | Sequence 30406, A |
| 508 | 4 | US-09-270-767-30406 | 10 | 100.0 | Sequence 30406, A |
| 521 | 4 | US-09-949-016-3503 | 10 | 100.0 | Sequence 3503, Ap |
| 521 | 4 | US-09-949-016-3503 | 10 | 100.0 | Sequence 3503, Ap |
| 553 | 3 | US-09-222-575-152 | 10 | 100.0 | Sequence 152, App |
| 553 | 3 | US-09-222-575-152 | 10 | 100.0 | Sequence 152, App |
| 553 | 4 | US-09-389-681-152 | 10 | 100.0 | Sequence 152, App |
| 553 | 4 | US-09-389-681-152 | 10 | 100.0 | Sequence 152, App |
| 553 | 4 | US-09-620-405B-152 | 10 | 100.0 | Sequence 152, App |
| 553 | 4 | US-09-620-405B-152 | 10 | 100.0 | Sequence 152, App |
| 553 | 4 | US-09-339-338-152 | 10 | 100.0 | Sequence 152, App |
| 553 | 4 | US-09-339-338-152 | 10 | 100.0 | Sequence 152, App |
| 553 | 4 | US-09-433-826B-152 | 10 | 100.0 | Sequence 152, App |
| 553 | 4 | US-09-433-826B-152 | 10 | 100.0 | Sequence 152, App |
| 553 | 4 | US-09-604-287A-152 | 10 | 100.0 | Sequence 152, App |
| 553 | 4 | US-09-604-287A-152 | 10 | 100.0 | Sequence 152, App |
| 553 | 4 | US-09-285-480-152 | 10 | 100.0 | Sequence 152, App |
| 553 | 4 | US-09-285-480-152 | 10 | 100.0 | Sequence 152, App |
| 553 | 4 | US-09-834-759-152 | 10 | 100.0 | Sequence 152, App |
| 553 | 4 | US-09-834-759-152 | 10 | 100.0 | Sequence 152, App |
| 553 | 4 | US-09-590-751A-152 | 10 | 100.0 | Sequence 152, App |
| 553 | 4 | US-09-590-751A-152 | 10 | 100.0 | Sequence 152, App |
| 553 | 4 | US-09-551-621-152 | 10 | 100.0 | Sequence 152, App |
| 553 | 4 | US-09-551-621-152 | 10 | 100.0 | Sequence 152, App |
| 581 | 4 | US-09-621-976-3556 | 10 | 100.0 | Sequence 3556, Ap |
| 581 | 4 | US-09-621-976-3556 | 10 | 100.0 | Sequence 3556, Ap |
| 581 | 4 | US-09-270-767-26201 | 10 | 100.0 | Sequence 26201, A |
| 581 | 4 | US-09-270-767-26201 | 10 | 100.0 | Sequence 26201, A |
| 582 | 4 | US-09-252-991A-12907 | 10 | 100.0 | Sequence 12907, A |
| 582 | 4 | US-09-252-991A-12907 | 10 | 100.0 | Sequence 12907, A |
| 597 | 4 | US-09-489-039A-1408 | 10 | 100.0 | Sequence 1408, Ap |
| 597 | 4 | US-09-489-039A-1408 | 10 | 100.0 | Sequence 1408, Ap |
| 603 | 4 | US-09-489-039A-4244 | 10 | 100.0 | Sequence 4244, Ap |
| 603 | 4 | US-09-489-039A-4244 | 10 | 100.0 | Sequence 4244, Ap |
| 664 | 4 | US-09-621-976-3555 | 10 | 100.0 | Sequence 3555, Ap |
| 664 | 4 | US-09-621-976-3555 | 10 | 100.0 | Sequence 3555, Ap |
| 729 | 4 | US-09-270-767-14856 | 10 | 100.0 | Sequence 14856, A |
| 729 | 4 | US-09-270-767-14856 | 10 | 100.0 | Sequence 14856, A |
| 737 | 3 | US-08-469-260A-22 | 10 | 100.0 | Sequence 22, Appl |
| 737 | 3 | US-08-469-260A-22 | 10 | 100.0 | Sequence 22, Appl |
| 737 | 3 | US-08-488-446-22 | 10 | 100.0 | Sequence 22, Appl |
| 737 | 3 | US-08-488-446-22 | 10 | 100.0 | Sequence 22, Appl |
| 737 | 4 | US-08-488-446-22 | 10 | 100.0 | Sequence 22, Appl |
| 737 | 4 | US-08-488-446-22 | 10 | 100.0 | Sequence 22, Appl |
| 737 | 4 | US-08-467-344A-22 | 10 | 100.0 | Sequence 22, Appl |
| 737 | 4 | US-08-467-344A-22 | 10 | 100.0 | Sequence 22, Appl |
| 737 | 4 | US-08-424-550B-22 | 10 | 100.0 | Sequence 22, Appl |
| 737 | 4 | US-08-424-550B-22 | 10 | 100.0 | Sequence 22, Appl |
| 813 | 4 | US-09-107-532A-1566 | 10 | 100.0 | Sequence 1566, Ap |
| 813 | 4 | US-09-107-532A-1566 | 10 | 100.0 | Sequence 1566, Ap |
| 816 | 3 | US-08-776-251-10 | 10 | 100.0 | Sequence 10, Appl |
| 816 | 3 | US-08-776-251-10 | 10 | 100.0 | Sequence 10, Appl |
| 856 | 3 | US-08-998-416-537 | 10 | 100.0 | Sequence 537, App |
| 856 | 3 | US-08-998-416-537 | 10 | 100.0 | Sequence 537, App |
| 964 | 4 | US-09-270-767-10741 | 10 | 100.0 | Sequence 10741, A |
| 964 | 4 | US-09-270-767-10741 | 10 | 100.0 | Sequence 10741, A |

ALIGNMENTS

RESULT 1
US-08-882-704A-18
; Sequence 18, Application US/08882704A
; Patent No. 5879906
; GENERAL INFORMATION:
; APPLICANT: Jefferson, Richard A.
; APPLICANT: Wilson, Katherine J.
; APPLICANT: Leader, Michael
; TITLE OF INVENTION: GLUCURONIDE REPRESSORS AND USES THEREOF
; NUMBER OF SEQUENCES: 19
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: SEED and BERRY LLP
; STREET: 6300 Columbia Center, 701 Fifth Avenue
; CITY: Seattle
; STATE: Washington
; COUNTRY: USA
; ZIP: 98104-7092
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/882,704A
; FILING DATE: 25-JUN-1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: No. 5879906tenburg Ph.D., Carol
; REGISTRATION NUMBER: 39,317
; REFERENCE/DOCKET NUMBER: 190106.404
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (206) 622-4900
; TELEFAX: (206) 682-6031
; INFORMATION FOR SEQ ID NO: 18:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 22 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-882-704A-18
; Query Match 100.0%; Score 10; DB 2; Length 22;
; Best Local Similarity 100.0%; Pred. No. 1.2e+03;
; Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
; Qy 1 CGAACGTTTCG 10
; Db 9 CGAACGTTTCG 18
; RESULT 2
US-08-882-704A-18/c
; Sequence 18, Application US/08882704A
; Patent No. 5879906
; GENERAL INFORMATION:
; APPLICANT: Jefferson, Richard A.
; APPLICANT: Wilson, Katherine J.
; APPLICANT: Leader, Michael
; TITLE OF INVENTION: GLUCURONIDE REPRESSORS AND USES THEREOF
; NUMBER OF SEQUENCES: 19
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: SEED and BERRY LLP
; STREET: 6300 Columbia Center, 701 Fifth Avenue
; CITY: Seattle
; STATE: Washington
; COUNTRY: USA
; ZIP: 98104-7092
; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/882,704A
; FILING DATE: 25-JUN-1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: No. 5879906tenburg Ph.D., Carol
; REGISTRATION NUMBER: 39,317
; REFERENCE/DOCKET NUMBER: 190106.404
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (206) 622-4900
; TELEFAX: (206) 682-6031
; INFORMATION FOR SEQ ID NO: 18:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 22 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-882-704A-18
; Query Match 100.0%; Score 10; DB 2; Length 22;
; Best Local Similarity 100.0%; Pred. No. 1.2e+03;
; Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
; Qy 1 CGAACGTTTCG 10
; Db 18 CGAACGTTTCG 9
; RESULT 3
US-09-151-957-18
; Sequence 18, Application US/09151957
; Patent No. 6429292
; GENERAL INFORMATION:
; APPLICANT: Jefferson, Richard A.
; APPLICANT: Leader, Michael
; TITLE OF INVENTION: GLUCURONIDE REPRESSORS AND USES THEREOF
; NUMBER OF SEQUENCES: 19
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: SEED and BERRY LLP
; STREET: 6300 Columbia Center, 701 Fifth Avenue
; CITY: Seattle
; STATE: Washington
; COUNTRY: USA
; ZIP: 98104-7092
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/151,957
; FILING DATE: 11-Sep-1998
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/882,704
; FILING DATE: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: No. 6429292tenburg Ph.D., Carol
; REGISTRATION NUMBER: 39,317
; REFERENCE/DOCKET NUMBER: 190106.404
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (206) 622-4900
; TELEFAX: (206) 682-6031
; INFORMATION FOR SEQ ID NO: 18:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 22 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single

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;
; TOPOLOGY: linear
; SEQUENCE DESCRIPTION: SEQ ID NO: 18:
US-09-151-957-18
Query Match 100.0%; Score 10; DB 3; Length 22;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 9 CGAACGTTTCG 18

RESULT 4
US-09-151-957-18/c
; Sequence 18, Application US/09151957
; Patent No. 6429292
; GENERAL INFORMATION:
; APPLICANT: Jefferson, Richard A.
; APPLICANT: Leader, Michael
; TITLE OF INVENTION: GLUCURONIDE REPRESSORS AND USES THEREOF
; NUMBER OF SEQUENCES: 19
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: SEED and BERRY LLP
; STREET: 6300 Columbia Center, 701 Fifth Avenue
; CITY: Seattle
; STATE: Washington
; COUNTRY: USA
; ZIP: 98104-7092
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: IBM PC compatible
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/882,704A
; FILING DATE: 25-JUN-1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: No. 5879906tenburg Ph.D., Carol
; REGISTRATION NUMBER: 39,317
; REFERENCE/DOCKET NUMBER: 190106.404
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (206) 622-4900
; TELEFAX: (206) 682-6031
; INFORMATION FOR SEQ ID NO: 16:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 48 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-882-704A-16

Query Match 100.0%; Score 10; DB 2; Length 48;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 25 CGAACGTTTCG 34

RESULT 6
US-08-882-704A-16/c
; Sequence 16, Application US/08882704A
; Patent No. 5879906
; GENERAL INFORMATION:
; APPLICANT: Jefferson, Richard A.
; APPLICANT: Wilson, Katherine J.
; APPLICANT: Leader, Michael
; TITLE OF INVENTION: GLUCURONIDE REPRESSORS AND USES THEREOF
; NUMBER OF SEQUENCES: 19
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: SEED and BERRY LLP
; STREET: 6300 Columbia Center, 701 Fifth Avenue
; CITY: Seattle
; STATE: Washington
; COUNTRY: USA
; ZIP: 98104-7092
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: IBM PC compatible
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/882,704A
; FILING DATE: 25-JUN-1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: No. 5879906tenburg Ph.D., Carol
; REGISTRATION NUMBER: 39,317
; REFERENCE/DOCKET NUMBER: 190106.404
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (206) 622-4900
; TELEFAX: (206) 682-6031
; INFORMATION FOR SEQ ID NO: 18:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 22 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-09-151-957-18

Query Match 100.0%; Score 10; DB 3; Length 22;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 18 CGAACGTTTCG 9

RESULT 5
US-08-882-704A-16
; Sequence 16, Application US/08882704A
; Patent No. 5879906
; GENERAL INFORMATION:
; APPLICANT: Jefferson, Richard A.

```



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; CITY: Newport Beach
; STATE: CA
; COUNTRY: U.S.A.
; ZIP: 92660
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/633,768A
; FILING DATE: 02-JUL-1996
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 9321301.5
; FILING DATE: 15-OCT-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Altman, Daniel E
; REGISTRATION NUMBER: 34,115
; REFERENCE/DOCKET NUMBER: DY0U7.001APC
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 714-760-0404
; TELEFAX: 714-760-9502
; TELEX:
; INFORMATION FOR SEQ ID NO: 12:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 71 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: Genomic DNA
; US-08-633-768A-12

Query Match 100.0%; Score 10; DB 3; Length 71;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 17 CGAACGTTTCG 26

RESULT 10
US-08-633-768A-12/c
; Sequence 12, Application US/08633768A
; Patent No. 6013504
; GENERAL INFORMATION:
; APPLICANT: YU, SHUKUN
; APPLICANT: BOJSEN, KIRSTEN
; APPLICANT: KRAGH, KARSTEN
; APPLICANT: BOJKO, MAJA
; APPLICANT: NIELSEN, JOHN
; APPLICANT: MARCUSSEN, JAN
; TITLE OF INVENTION: ALPHA-1,4-GLUCAN LYASE FROM
; TITLE OF INVENTION: A FUNGUS INFECTED ALGAE, ITS PURIFICATION
; NUMBER OF SEQUENCES: 25
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Knobbe, Martens, Olson & Bear
; STREET: 620 Newport Center Drive 16th Floor
; CITY: Newport Beach
; STATE: CA
; COUNTRY: U.S.A.
; ZIP: 92660
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/633,768A
; FILING DATE: 02-JUL-1996
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
```

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; APPLICATION NUMBER: 9321301.5
; FILING DATE: 15-OCT-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Altman, Daniel E
; REGISTRATION NUMBER: 34,115
; REFERENCE/DOCKET NUMBER: DY0U7.001APC
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 714-760-0404
; TELEFAX: 714-760-9502
; TELEX:
; INFORMATION FOR SEQ ID NO: 12:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 71 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: Genomic DNA
; US-08-633-768A-12

Query Match 100.0%; Score 10; DB 3; Length 71;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 26 CGAACGTTTCG 17

RESULT 11
US-09-280-197-22
; Sequence 22, Application US/09280197
; Patent No. 6632643
; GENERAL INFORMATION:
; APPLICANT: Yu, Shukun
; APPLICANT: Bojsen, Kirsten
; APPLICANT: Kragh, Karsten
; APPLICANT: Bojko, Maja
; APPLICANT: Nielsen, John
; APPLICANT: Marcussen, Jan
; APPLICANT: Christensen, Tove
; TITLE OF INVENTION: USE OF 1,4-GLUCAN LYASE FOR PREPARATION OF
; TITLE OF INVENTION: 1,5-D-ANHYDROFRUCTOSE
; NUMBER OF SEQUENCES: 39
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Knobbe, Martens, Olson & Bear
; STREET: 620 Newport Center Drive 16th Floor
; CITY: Newport Beach
; STATE: CA
; COUNTRY: U.S.A.
; ZIP: 92660
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25 (BPO)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/280,197
; FILING DATE:
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/633,719
; FILING DATE: July 8, 1996
; APPLICATION NUMBER: PCT/EP94/03397
; FILING DATE: OCT-15-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Altman, Daniel E
; REGISTRATION NUMBER: 34,115
; REFERENCE/DOCKET NUMBER: DY0U5.001APC
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 714-760-0404
; TELEFAX: 714-760-9502
; TELEX:
; INFORMATION FOR SEQ ID NO: 22:
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SEQUENCE CHARACTERISTICS:
LENGTH: 71 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: cdna
US-09-280-197-22

Query Match 100.0%; Score 10; DB 4; Length 71;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 17 CGAACGTTTCG 26

RESULT 12

US-09-280-197-22/c
; Sequence 22, Application US/09280197
; Patent No. 6632643
; GENERAL INFORMATION:
; APPLICANT: Yu, Shukun
; APPLICANT: Bojsen, Kirsten
; APPLICANT: Krach, Karsten
; APPLICANT: Bojko, Maja
; APPLICANT: Nielsen, John
; APPLICANT: Marcussen, Jan
; APPLICANT: Christensen, Tove
; TITLE OF INVENTION: USE OF 1,4-GLUCAN LYASE FOR PREPARATION OF
; TITLE OF INVENTION: 1,5-D-ANHYDROFRUCTOSE
; NUMBER OF SEQUENCES: 39
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Knobbe, Martens, Olson & Bear
; STREET: 620 Newport Center Drive 16th Floor
; CITY: Newport Beach
; STATE: CA
; COUNTRY: U.S.A.
; ZIP: 92660

COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25 (EPO)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/280,197
FILING DATE:
CLASSIFICATION: 435

PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/633,719
FILING DATE: July 8, 1996
APPLICATION NUMBER: PCT/EP94/03397
FILING DATE: OCT-15-1994
ATTORNEY/AGENT INFORMATION:
NAME: Altman, Daniel E
REGISTRATION NUMBER: 34,115
REFERENCE/DOCKET NUMBER: DYOUS.001APC
TELECOMMUNICATION INFORMATION:
TELEPHONE: 714-760-0404
TELEFAX: 714-760-9502
TELEX:

INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 71 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: cdna
US-09-280-197-22

Query Match 100.0%; Score 10; DB 4; Length 71;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 26 CGAACGTTTCG 17

RESULT 13

US-08-399-412A-58
; Sequence 58, Application US/08399412A
; Patent No. 5622828
; GENERAL INFORMATION:
; APPLICANT: Parma, David
; APPLICANT: Gold, Larry
; TITLE OF INVENTION: High-Affinity Oligonucleotide
; TITLE OF INVENTION: Ligands To Secretory Phospholipase
; TITLE OF INVENTION: A2 (sPLA2)
; NUMBER OF SEQUENCES: 122
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Swanson & Bratschun, L.L.C.
; STREET: 8400 E. Prentice Avenue, Suite 200
; CITY: Englewood
; STATE: Colorado
; COUNTRY: USA
; ZIP: 80111
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette, 3.5 inch, 1.44 MB storage
; COMPUTER: IBM compatible
; OPERATING SYSTEM: MS-DOS
; SOFTWARE: WordPerfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/399,412A
; FILING DATE: 6-MARCH-1995
; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/714,131
; FILING DATE: 10-JUNE-1991
; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/536,428
; FILING DATE: 11-JUNE-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/964,624
; FILING DATE: 21-OCTOBER-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Julie L. Bernard
; REGISTRATION NUMBER: 36,450
; REFERENCE/DOCKET NUMBER: NEX27
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (303) 793-3333
; TELEFAX: (303) 793-3433
; INFORMATION FOR SEQ ID NO: 58:
SEQUENCE CHARACTERISTICS:
LENGTH: 77 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
US-08-399-412A-58

Query Match 100.0%; Score 10; DB 1; Length 77;
Best Local Similarity 80.0%; Pred. No. 1.2e+03;
Matches 8; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 48 CGAACGTTTCG 57

RESULT 14

US-08-399-412A-58/c
; Sequence 58, Application US/08399412A
; Patent No. 5622828
; GENERAL INFORMATION:
; APPLICANT: Parma, David

APPLICANT: Gold, Larry
TITLE OF INVENTION: High-Affinity Oligonucleotide
TITLE OF INVENTION: Ligands to Secretory Phospholipase
TITLE OF INVENTION: A2 (sPLA2)
NUMBER OF SEQUENCES: 122
CORRESPONDENCE ADDRESS:
ADDRESSEE: Swanson & Bratschun, L.L.C. 200
STREET: 8400 E. Prentice Avenue, Suite 200
CITY: Englewood
STATE: Colorado
COUNTRY: USA
ZIP: 80111
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.5 inch, 1.44 MB storage
COMPUTER: IBM compatible
OPERATING SYSTEM: MS-DOS
SOFTWARE: Wordperfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/399,412A
FILING DATE: 6-MARCH-1995
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/714,131
FILING DATE: 10-JUNE-1991
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/536,428
FILING DATE: 11-JUNE-1990
APPLICATION DATA:
APPLICATION NUMBER: 07/964,624
FILING DATE: 21-OCTOBER-1992
ATTORNEY/AGENT INFORMATION:
NAME: Julie L. Bernard
REGISTRATION NUMBER: 36,450
REFERENCE/DOCKET NUMBER: NEX27
TELECOMMUNICATION INFORMATION:
TELEPHONE: (303) 793-3333
TELEFAX: (303) 793-3433
INFORMATION FOR SEQ ID NO: 58:
SEQUENCE CHARACTERISTICS:
LENGTH: 77 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
US-08-399-412A-58

Query Match 100.0%; Score 10; DB 1; Length 77;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 57 CGAACGTTTCG 48

RESULT 15
US-09-270-767-31109
Sequence 31109, Application US/09270767
Patent No. 6703491
GENERAL INFORMATION:
APPLICANT: Homburger et al.
TITLE OF INVENTION: Nucleic acids and proteins of *Drosophila melanogaster*
FILE REFERENCE: File Reference: 7326-094
CURRENT APPLICATION NUMBER: US/09/270,767
CURRENT FILING DATE: 1999-03-17
NUMBER OF SEQ ID NOS: 62517
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 31109
LENGTH: 89
TYPE: DNA
ORGANISM: *Drosophila melanogaster*
US-09-270-767-31109

Query Match 100.0%; Score 10; DB 4; Length 89;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 14 CGAACGTTTCG 23

RESULT 16
US-09-270-767-31109/c
Sequence 31109, Application US/09270767
Patent No. 6703491
GENERAL INFORMATION:
APPLICANT: Homburger et al.
TITLE OF INVENTION: Nucleic acids and proteins of *Drosophila melanogaster*
FILE REFERENCE: File Reference: 7326-094
CURRENT APPLICATION NUMBER: US/09/270,767
CURRENT FILING DATE: 1999-03-17
NUMBER OF SEQ ID NOS: 62517
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 31109
LENGTH: 89
TYPE: DNA
ORGANISM: *Drosophila melanogaster*
US-09-270-767-31109

Query Match 100.0%; Score 10; DB 4; Length 89;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 23 CGAACGTTTCG 14

RESULT 17
US-08-633-768A-14
Sequence 14, Application US/08633768A
Patent No. 6013504
GENERAL INFORMATION:
APPLICANT: YU, SHUKUN
APPLICANT: BOJSEN, KIRSTEN
APPLICANT: KRAGH, KARSTEN
APPLICANT: BOJKO, MAJA
APPLICANT: NIELSEN, JOHN
APPLICANT: MARCUSSEN, JAN
TITLE OF INVENTION: ALPHA-1,4-GLUCAN LYASE FROM
TITLE OF INVENTION: A FUNGUS INFECTED ALGAE, ITS PURIFICATION
NUMBER OF SEQUENCES: 25
CORRESPONDENCE ADDRESS:
ADDRESSEE: Knobbe, Martens, Olson & Bear
STREET: 620 Newport Center Drive 16th Floor
CITY: Newport Beach
STATE: CA
COUNTRY: U.S.A.
ZIP: 92660
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/633,768A
FILING DATE: 02-JUL-1996
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 9321301.5
FILING DATE: 15-OCT-1993
ATTORNEY/AGENT INFORMATION:
NAME: Altman, Daniel E
REGISTRATION NUMBER: 34,115
REFERENCE/DOCKET NUMBER: DY0U7.001APC

TELECOMMUNICATION INFORMATION:

TELEPHONE: 714-760-0404
TELEFAX: 714-760-9502

INFORMATION FOR SEQ ID NO: 14:

SEQUENCE CHARACTERISTICS:
LENGTH: 160 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: Genomic DNA
US-08-633-768A-14

Query Match 100.0%; Score 10; DB 3; Length 160;

Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 17 CGAACGTTTCG 26

RESULT 18

US-08-633-768A-14/c
; Sequence 14, Application US/08633768A
; Patent No. 6013504

GENERAL INFORMATION:

APPLICANT: YU, SHUKUN
APPLICANT: BOJSEN, KIRSTEN
APPLICANT: KRAGH, KARSTEN
APPLICANT: BOJJO, MAJA
APPLICANT: NIELSEN, JOHN
APPLICANT: MARCUSSEN, JAN
TITLE OF INVENTION: ALPHA-1,4-GLUCAN LYASE FROM
A FUNGUS INFECTED ALGAE, ITS PURIFICATION
NUMBER OF SEQUENCES: 25
CORRESPONDENCE ADDRESS:
ADDRESSEE: Knobbe, Martens, Olson & Bear
STREET: 620 Newport Center Drive 16th Floor
CITY: Newport Beach
STATE: CA
COUNTRY: U.S.A.
ZIP: 92660

COMPUTER READABLE FORM:

COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/633,768A
FILING DATE: 02-JUL-1996
CLASSIFICATION: 435

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 9321301.5
FILING DATE: 15-OCT-1993
ATTORNEY/AGENT INFORMATION:
NAME: Altman, Daniel E
REGISTRATION NUMBER: 34,115
REFERENCE/DOCKET NUMBER: DYO07.001APC
TELECOMMUNICATION INFORMATION:
TELEPHONE: 714-760-0404
TELEFAX: 714-760-9502

TELEX:

INFORMATION FOR SEQ ID NO: 14:
SEQUENCE CHARACTERISTICS:
LENGTH: 160 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: Genomic DNA
US-08-633-768A-14

Query Match

100.0%; Score 10; DB 3; Length 160;

Best Local Similarity 100.0%; Pred. No. 1.2e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 26 CGAACGTTTCG 17

RESULT 19

US-09-280-197-24
; Sequence 24, Application US/09280197
; Patent No. 6632643

GENERAL INFORMATION:

APPLICANT: Yu, Shukun
APPLICANT: Bojsen, Kirsten
APPLICANT: Kragh, Karsten
APPLICANT: Bojko, Maja
APPLICANT: Nielsen, John
APPLICANT: Marcussen, Jan
APPLICANT: Christensen, Tove
TITLE OF INVENTION: USE OF '-1,4-GLUCAN LYASE FOR PREPARATION OF
TITLE OF INVENTION: 1,5-D-ANHYDROFRUCTOSE
NUMBER OF SEQUENCES: 39
CORRESPONDENCE ADDRESS:
ADDRESSEE: Knobbe, Martens, Olson & Bear
STREET: 620 Newport Center Drive 16th Floor
CITY: Newport Beach
STATE: CA
COUNTRY: U.S.A.
ZIP: 92660

COMPUTER READABLE FORM:

COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: Patent In Release #1.0, Version #1.25 (EPO)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/280,197
FILING DATE:
CLASSIFICATION: 435

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/633,719
FILING DATE: July 8, 1996
APPLICATION NUMBER: PCT/EP94/03397
FILING DATE: OCT-15-1994
ATTORNEY/AGENT INFORMATION:
NAME: Altman, Daniel E
REGISTRATION NUMBER: 34,115
REFERENCE/DOCKET NUMBER: DYO05.001APC
TELECOMMUNICATION INFORMATION:
TELEPHONE: 714-760-0404
TELEFAX: 714-760-9502

INFORMATION FOR SEQ ID NO: 24:

SEQUENCE CHARACTERISTICS:
LENGTH: 160 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: cdna
US-09-280-197-24

Query Match

100.0%; Score 10; DB 4; Length 160;

Best Local Similarity 100.0%; Pred. No. 1.2e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 17 CGAACGTTTCG 26

RESULT 20

US-09-280-197-24/c

; Sequence 24, Application US/09280197

; Patent No. 6632643
; GENERAL INFORMATION:
; APPLICANT: Yu, Shukun
; APPLICANT: Bojseen, Kirsten
; APPLICANT: Kragh, Karsten
; APPLICANT: Bojko, Maja
; APPLICANT: Nielsen, John
; APPLICANT: Marcussen, Jan
; APPLICANT: Christensen, Tove
; TITLE OF INVENTION: USE OF 1-1,4-GLUCAN LYASE FOR PREPARATION OF
; TITLE OF INVENTION: 1,5-D-ANHYDROFRUCTOSE
; NUMBER OF SEQUENCES: 39
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Knobbe, Martens, Olson & Bear
; STREET: 620 Newport Center Drive 16th Floor
; CITY: Newport Beach
; STATE: CA
; COUNTRY: U.S.A.
; ZIP: 92660
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: Patent in Release #1.0, Version #1.25 (EPO)
; CURRENT APPLICATION DATA: US/09/280,197
; APPLICATION NUMBER: US/09/280,197
; FILING DATE:
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/633,719
; FILING DATE: July 8, 1996
; APPLICATION NUMBER: PCT/EP94/03397
; FILING DATE: OCT-15-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Altman, Daniel E
; REGISTRATION NUMBER: 34,115
; REFERENCE/DOCKET NUMBER: DPOUS.001APC
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 714-760-0404
; TELEFAX: 714-760-9502
; TELEX:
; INFORMATION FOR SEQ ID NO: 24:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 160 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: cdna
; US-09-280-197-24

Query Match 100.0%; Score 10; DB 4; Length 160;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 26 CGAACGTTTCG 17

RESULT 21
US-09-313-294A-5372
; Sequence 5372, Application US/09313294A
; Patent No. 6476212
; GENERAL INFORMATION:
; APPLICANT: Lalgudi, Raghunath V.
; APPLICANT: Ito, Laura Y.
; TITLE OF INVENTION: POLYNUCLEOTIDES AND POLYPEPTIDES DERIVED FROM CORN EAR
; FILE REFERENCE: PL-0017 US
; CURRENT APPLICATION NUMBER: US/09/313,294A
; CURRENT FILING DATE: 1999-05-14
; SOFTWARE: PERL Program

; SEQ ID NO 5372
; LENGTH: 284
; TYPE: DNA
; ORGANISM: Zea mays
; FEATURE:
; NAME/KEY: misc feature
; OTHER INFORMATION: Incyte ID No. 6476212 700350040H1
; NAME/KEY: unsure
; LOCATION: 272
; OTHER INFORMATION: a, t, c, g, or other
; US-09-313-294A-5372

Query Match 100.0%; Score 10; DB 4; Length 284;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 220 CGAACGTTTCG 229

RESULT 22
US-09-313-294A-5372/c
; Sequence 5372, Application US/09313294A
; Patent No. 6476212
; GENERAL INFORMATION:
; APPLICANT: Lalgudi, Raghunath V.
; APPLICANT: Ito, Laura Y.
; APPLICANT: Sherman, Bradley K.
; TITLE OF INVENTION: POLYNUCLEOTIDES AND POLYPEPTIDES DERIVED FROM CORN EAR
; FILE REFERENCE: PL-0017 US
; CURRENT APPLICATION NUMBER: US/09/313,294A
; CURRENT FILING DATE: 1999-05-14
; NUMBER OF SEQ ID NOS: 7600
; SOFTWARE: PERL Program
; SEQ ID NO 5372
; LENGTH: 284
; TYPE: DNA
; ORGANISM: Zea mays
; FEATURE:
; NAME/KEY: misc feature
; OTHER INFORMATION: Incyte ID No. 6476212 700350040H1
; NAME/KEY: unsure
; LOCATION: 272
; OTHER INFORMATION: a, t, c, g, or other
; US-09-313-294A-5372

Query Match 100.0%; Score 10; DB 4; Length 284;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 229 CGAACGTTTCG 220

RESULT 23
US-09-252-991A-69
; Sequence 69, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 69

```
; LENGTH: 288
; TYPE: DNA
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-69

Query Match      100.0%; Score 10; DB 4; Length 288;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 83 CGAACGTTTCG 92

RESULT 24
US-09-252-991A-69/c
; Sequence 69, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 69
; LENGTH: 288
; TYPE: DNA
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-69

Query Match      100.0%; Score 10; DB 4; Length 288;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 92 CGAACGTTTCG 83

RESULT 25
US-09-902-540-1757
; Sequence 1757, Application US/09902540
; Patent No. 6833447
; GENERAL INFORMATION:
; APPLICANT: Goldman, Barry S.
; APPLICANT: Hinkle, Gregory J.
; APPLICANT: Slater, Steven C.
; APPLICANT: Wiegand, Roger C.
; TITLE OF INVENTION: Myxococcus xanthus Genome Sequences and Uses Thereof
; FILE REFERENCE: 38-10(15849)B
; CURRENT APPLICATION NUMBER: US/09/902,540
; CURRENT FILING DATE: 2001-07-10
; PRIOR APPLICATION NUMBER: 60/217,883
; PRIOR FILING DATE: 2000-07-10
; NUMBER OF SEQ ID NOS: 16825
; SEQ ID NO 1757
; LENGTH: 299
; TYPE: DNA
; ORGANISM: Myxococcus xanthus
US-09-902-540-1757

Query Match      100.0%; Score 10; DB 4; Length 299;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 83 CGAACGTTTCG 92

RESULT 26
US-09-902-540-1757/c
; Sequence 1757, Application US/09902540
; Patent No. 6833447
; GENERAL INFORMATION:
; APPLICANT: Goldman, Barry S.
; APPLICANT: Hinkle, Gregory J.
; APPLICANT: Slater, Steven C.
; APPLICANT: Wiegand, Roger C.
; TITLE OF INVENTION: Myxococcus xanthus Genome Sequences and Uses Thereof
; FILE REFERENCE: 38-10(15849)B
; CURRENT APPLICATION NUMBER: US/09/902,540
; CURRENT FILING DATE: 2001-07-10
; PRIOR APPLICATION NUMBER: 60/217,883
; PRIOR FILING DATE: 2000-07-10
; NUMBER OF SEQ ID NOS: 16825
; SEQ ID NO 1757
; LENGTH: 299
; TYPE: DNA
; ORGANISM: Myxococcus xanthus
US-09-902-540-1757

Query Match      100.0%; Score 10; DB 4; Length 299;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 148 CGAACGTTTCG 139

RESULT 27
US-09-240-274-197
; Sequence 197, Application US/09240274
; Patent No. 6255455
; GENERAL INFORMATION:
; APPLICANT: Siegel, Donald L.
; TITLE OF INVENTION: Rh(D)-BINDING PROTEINS AND MAGNETICALLY ACTIVATED CELL
; TITLE OF INVENTION: SORTING METHOD FOR PRODUCTION THEREOF
; FILE REFERENCE: 09596-42U2
; CURRENT APPLICATION NUMBER: US/09/240,274
; CURRENT FILING DATE: 1999-01-29
; EARLIER APPLICATION NUMBER: 60/081,380
; EARLIER FILING DATE: 1998-04-10
; EARLIER APPLICATION NUMBER: 60/028,550
; EARLIER FILING DATE: 1996-10-11
; NUMBER OF SEQ ID NOS: 224
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 197
; LENGTH: 321
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: anti-Rh(D) antibody clone SH8
US-09-240-274-197

Query Match      100.0%; Score 10; DB 3; Length 321;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 283 CGAACGTTTCG 292

RESULT 28
US-09-240-274-197/c
; Sequence 197, Application US/09240274
; Patent No. 6255455
; GENERAL INFORMATION:
```

```
; APPLICANT: Siegel, Donald L.
; TITLE OF INVENTION: RH(D)-BINDING PROTEINS AND MAGNETICALLY ACTIVATED CELL
; FILE REFERENCE: 09596-42U2
; CURRENT APPLICATION NUMBER: US/09/240,274
; EARLIER FILING DATE: 1999-01-29
; EARLIER APPLICATION NUMBER: 60/081,380
; EARLIER FILING DATE: 1998-04-10
; EARLIER APPLICATION NUMBER: 60/028,550
; EARLIER FILING DATE: 1996-10-11
; NUMBER OF SEQ ID NOS: 224
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 197
; LENGTH: 321
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: anti-Rh(D) antibody clone SH8
US-09-240-274-197

Query Match      100.0%; Score 10; DB 3; Length 321;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTTTCG 10
Db      292 CGAACGTTTCG 283

RESULT 29
US-09-627-896B-26
; Sequence 26, Application US/09627896B
; Patent No. 6827934
; GENERAL INFORMATION:
; APPLICANT: CO, MAN SUNG
; APPLICANT: VASQUEZ, MAXIMILIANO
; APPLICANT: CARRENO, BEATRIZ
; APPLICANT: CELNIKER, ABBIE CHERYL
; APPLICANT: COLLINS, MARY
; APPLICANT: GOLDMAN, SAMUEL
; APPLICANT: GRAY, GARY S.
; APPLICANT: KNIGHT, ANDREA
; APPLICANT: O'HARA, DENISE
; APPLICANT: RUP, BONITA
; APPLICANT: VELDMAN, GEERTRUIDA M.
; TITLE OF INVENTION: HUMANIZED IMMUNOGLOBULIN REACTIVE WITH B7-2 AND METHODS
; FILE REFERENCE: 08702.0081-01000
; CURRENT APPLICATION NUMBER: US/09/627,896B
; CURRENT FILING DATE: 2000-07-27
; NUMBER OF SEQ ID NOS: 32
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 26
; LENGTH: 339
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: H2F light chain variable region
US-09-627-896B-26

Query Match      100.0%; Score 10; DB 4; Length 339;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTTTCG 10
Db      304 CGAACGTTTCG 313

RESULT 30
US-09-627-896B-26/c
; Sequence 26, Application US/09627896B
; Patent No. 6827934
```

```
; GENERAL INFORMATION:
; APPLICANT: CO, MAN SUNG
; APPLICANT: VASQUEZ, MAXIMILIANO
; APPLICANT: CARRENO, BEATRIZ
; APPLICANT: CELNIKER, ABBIE CHERYL
; APPLICANT: COLLINS, MARY
; APPLICANT: GOLDMAN, SAMUEL
; APPLICANT: GRAY, GARY S.
; APPLICANT: KNIGHT, ANDREA
; APPLICANT: O'HARA, DENISE
; APPLICANT: RUP, BONITA
; APPLICANT: VELDMAN, GEERTRUIDA M.
; TITLE OF INVENTION: HUMANIZED IMMUNOGLOBULIN REACTIVE WITH B7-2 AND METHODS
; FILE REFERENCE: 08702.0081-01000
; CURRENT APPLICATION NUMBER: US/09/627,896B
; CURRENT FILING DATE: 2000-07-27
; NUMBER OF SEQ ID NOS: 32
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 26
; LENGTH: 339
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: H2F light chain variable region
US-09-627-896B-26

Query Match      100.0%; Score 10; DB 4; Length 339;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTTTCG 10
Db      313 CGAACGTTTCG 304

RESULT 31
US-09-328-352-1
; Sequence 1, Application US/09328352
; Patent No. 6562958
; GENERAL INFORMATION:
; APPLICANT: Gary L. Breton et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO ACINETOBACTER
; TITLE OF INVENTION: BAUMANNII FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: GTC99-03PA
; CURRENT APPLICATION NUMBER: US/09/328,352
; CURRENT FILING DATE: 1999-06-04
; NUMBER OF SEQ ID NOS: 8252
; SEQ ID NO 1
; LENGTH: 372
; TYPE: DNA
; ORGANISM: Acinetobacter baumannii
US-09-328-352-1

Query Match      100.0%; Score 10; DB 4; Length 372;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTTTCG 10
Db      146 CGAACGTTTCG 155

RESULT 32
US-09-328-352-1/c
; Sequence 1, Application US/09328352
; Patent No. 6562958
; GENERAL INFORMATION:
; APPLICANT: Gary L. Breton et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO ACINETOBACTER
; TITLE OF INVENTION: BAUMANNII FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: GTC99-03PA
; CURRENT APPLICATION NUMBER: US/09/328,352
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; CURRENT FILING DATE: 1999-06-04
; NUMBER OF SEQ ID NOS: 8252
; SEQ ID NO 1
; LENGTH: 372
; TYPE: DNA
; ORGANISM: Acinetobacter baumannii
US-09-328-352-1

Query Match 100.0%; Score 10; DB 4; Length 372;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTGC 10
Db 155 CGAACGTTGC 146

RESULT 33
US-09-252-991A-5259
; Sequence 5259, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 5259
; LENGTH: 378
; TYPE: DNA
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-5259

Query Match 100.0%; Score 10; DB 4; Length 378;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTGC 10
Db 16 CGAACGTTGC 25

RESULT 34
US-09-252-991A-5259/c
; Sequence 5259, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 5259
; LENGTH: 378
; TYPE: DNA
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-5259

Query Match 100.0%; Score 10; DB 4; Length 378;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTGC 10
Db 25 CGAACGTTGC 16

RESULT 35
US-08-882-704A-3
; Sequence 3, Application US/08882704A
; Patent No. 5879906
; GENERAL INFORMATION:
; APPLICANT: Jefferson, Richard A.
; APPLICANT: Wilson, Katherine J.
; APPLICANT: Leader, Michael
; TITLE OF INVENTION: GLUCURONIDE REPRESSORS AND USES THEREOF
; NUMBER OF SEQUENCES: 19
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: SEED and BERRY LLP
; STREET: 6300 Columbia Center, 701 Fifth Avenue
; CITY: Seattle
; STATE: Washington
; COUNTRY: USA
; ZIP: 98104-7092
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/882,704A
; FILING DATE: 25-JUN-1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: No. 5879906tenburg Ph.D., Carol
; REGISTRATION NUMBER: 39,317
; REFERENCE/DOCKET NUMBER: 190106.404
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (206) 622-4900
; TELEFAX: (206) 682-6031
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 390 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-882-704A-3

Query Match 100.0%; Score 10; DB 2; Length 390;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTGC 10
Db 159 CGAACGTTGC 168

RESULT 36
US-08-882-704A-3/c
; Sequence 3, Application US/08882704A
; Patent No. 5879906
; GENERAL INFORMATION:
; APPLICANT: Jefferson, Richard A.
; APPLICANT: Wilson, Katherine J.
; APPLICANT: Leader, Michael
; TITLE OF INVENTION: GLUCURONIDE REPRESSORS AND USES THEREOF
; NUMBER OF SEQUENCES: 19
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: SEED and BERRY LLP
; STREET: 6300 Columbia Center, 701 Fifth Avenue
; CITY: Seattle
; STATE: Washington
; COUNTRY: USA
; ZIP: 98104-7092

```
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/882,704A
; FILING DATE: 25-JUN-1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: No. 5879906tenburg Ph.D., Carol
; REGISTRATION NUMBER: 39,317
; REFERENCE/DOCKET NUMBER: 190106.404
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (206) 622-4900
; TELEFAX: (206) 682-6031
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 390 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
;
US-08-882-704A-3
;
Query Match 100.0%; Score 10; DB 2; Length 390;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 168 CGAACGTTTCG 159

RESULT 37
US-09-151-957-3
; Sequence 3, Application US/09151957
; Patent No. 6429292
; GENERAL INFORMATION:
; APPLICANT: Jefferson, Richard A.
; Leader, Michael
; TITLE OF INVENTION: GLUCURONIDE REPRESSORS AND USES THEREOF
; NUMBER OF SEQUENCES: 19
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: SEED AND BERRY LLP
; STREET: 6300 Columbia Center, 701 Fifth Avenue
; CITY: Seattle
; STATE: Washington
; COUNTRY: USA
; ZIP: 98104-7092
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/151,957
; FILING DATE: 11-Sep-1998
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/882,704
; FILING DATE: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: No. 6429292tenburg Ph.D., Carol
; REGISTRATION NUMBER: 39,317
; REFERENCE/DOCKET NUMBER: 190106.404
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (206) 622-4900
; TELEFAX: (206) 682-6031
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 390 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
;
US-09-151-957-3
;
Query Match 100.0%; Score 10; DB 3; Length 390;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 168 CGAACGTTTCG 159

RESULT 38
US-09-151-957-3/c
; Sequence 3, Application US/09151957
; Patent No. 6429292
; GENERAL INFORMATION:
; APPLICANT: Jefferson, Richard A.
; Leader, Michael
; TITLE OF INVENTION: GLUCURONIDE REPRESSORS AND USES THEREOF
; NUMBER OF SEQUENCES: 19
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: SEED AND BERRY LLP
; STREET: 6300 Columbia Center, 701 Fifth Avenue
; CITY: Seattle
; STATE: Washington
; COUNTRY: USA
; ZIP: 98104-7092
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/151,957
; FILING DATE: 11-Sep-1998
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/882,704
; FILING DATE: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: No. 6429292tenburg Ph.D., Carol
; REGISTRATION NUMBER: 39,317
; REFERENCE/DOCKET NUMBER: 190106.404
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (206) 622-4900
; TELEFAX: (206) 682-6031
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 390 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
;
US-09-151-957-3
;
Query Match 100.0%; Score 10; DB 3; Length 390;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 168 CGAACGTTTCG 159

RESULT 39
US-09-513-999C-1579
; Sequence 1579, Application US/09513999C
; Patent No. 6783961
; GENERAL INFORMATION:
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;
; STRANDEDNESS: single
; TOPOLOGY: linear
; SEQUENCE DESCRIPTION: SEQ ID NO: 3:
US-09-151-957-3
;
Query Match 100.0%; Score 10; DB 3; Length 390;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 159 CGAACGTTTCG 168

RESULT 38
US-09-151-957-3/c
; Sequence 3, Application US/09151957
; Patent No. 6429292
; GENERAL INFORMATION:
; APPLICANT: Jefferson, Richard A.
; Leader, Michael
; TITLE OF INVENTION: GLUCURONIDE REPRESSORS AND USES THEREOF
; NUMBER OF SEQUENCES: 19
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: SEED AND BERRY LLP
; STREET: 6300 Columbia Center, 701 Fifth Avenue
; CITY: Seattle
; STATE: Washington
; COUNTRY: USA
; ZIP: 98104-7092
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/151,957
; FILING DATE: 11-Sep-1998
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/882,704
; FILING DATE: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: No. 6429292tenburg Ph.D., Carol
; REGISTRATION NUMBER: 39,317
; REFERENCE/DOCKET NUMBER: 190106.404
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (206) 622-4900
; TELEFAX: (206) 682-6031
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 390 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
;
US-09-151-957-3
;
Query Match 100.0%; Score 10; DB 3; Length 390;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 168 CGAACGTTTCG 159

RESULT 39
US-09-513-999C-1579
; Sequence 1579, Application US/09513999C
; Patent No. 6783961
; GENERAL INFORMATION:
```

; APPLICANT: Dumas Milne Edwards, J.B.
; APPLICANT: Duclert, A.
; APPLICANT: Giordano, J.Y.
; TITLE OF INVENTION: Expressed Sequence Tags and Encoded Human Proteins.
; Patent No. 6783961
; FILE REFERENCE: 59.US2.REG
; CURRENT APPLICATION NUMBER: US/09/513.999C
; CURRENT FILING DATE: 2000-02-24
; PRIOR APPLICATION NUMBER: US 60/122,487
; PRIOR FILING DATE: 1999-02-26
; NUMBER OF SEQ ID NOS: 36681
; SOFTWARE: Patent.pm
; SEQ ID NO 1579
; LENGTH: 390
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 162..389
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: 357
; OTHER INFORMATION: r=a or g
; FEATURE:
; NAME/KEY: UNSURE
; LOCATION: 66
; OTHER INFORMATION: Xaa=Glu or Lys
US-09-513-999C-1579

Query Match 100.0%; Score 10; DB 4; Length 390;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 22 CGAACGTTTCG 31
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RESULT 40

US-09-513-999C-1579/c
; Sequence 1579, Application US/09513999C
; Patent No. 6783961
; GENERAL INFORMATION:
; APPLICANT: Dumas Milne Edwards, J.B.
; APPLICANT: Duclert, A.
; APPLICANT: Giordano, J.Y.
; TITLE OF INVENTION: Expressed Sequence Tags and Encoded Human Proteins.
; Patent No. 6783961
; FILE REFERENCE: 59.US2.REG
; CURRENT APPLICATION NUMBER: US/09/513.999C
; CURRENT FILING DATE: 2000-02-24
; PRIOR APPLICATION NUMBER: US 60/122,487
; PRIOR FILING DATE: 1999-02-26
; NUMBER OF SEQ ID NOS: 36681
; SOFTWARE: Patent.pm
; SEQ ID NO 1579
; LENGTH: 390
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 162..389
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: 357
; OTHER INFORMATION: r=a or g
; FEATURE:
; NAME/KEY: UNSURE
; LOCATION: 66
; OTHER INFORMATION: Xaa=Glu or Lys
US-09-513-999C-1579

Query Match 100.0%; Score 10; DB 4; Length 390;

Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
Db 31 CGAACGTTTCG 22
|||||

RESULT 41

US-09-060-756-563
; Sequence 563, Application US/09060756
; Patent No. 6183957
; GENERAL INFORMATION:
; APPLICANT: Cole, Stewart
; APPLICANT: Buchrieser-Brosch, Roland
; APPLICANT: Gordon, Stephen
; APPLICANT: Billault, Alain
; TITLE OF INVENTION: METHOD FOR ISOLATING A POLYNUCLEOTIDE OF INTEREST FROM
; TITLE OF INVENTION: THE GENOME OF A MYCOBACTERIUM USING A BAC-BASED DNA
; TITLE OF INVENTION: LIBRARY APPLICATION TO THE DETECTION OF MYCOBACTERIA
; FILE REFERENCE: 3495-0169
; CURRENT APPLICATION NUMBER: US/09/060,756
; CURRENT FILING DATE: 1998-04-16
; NUMBER OF SEQ ID NOS: 743
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 563
; LENGTH: 406
; TYPE: DNA
; ORGANISM: Mycobacterium tuberculosis
; FEATURE:
; NAME/KEY: unsure
; LOCATION: (various positions within the sequence)
; OTHER INFORMATION: applicants are uncertain of bases designated as "n"
US-09-060-756-563

Query Match 100.0%; Score 10; DB 3; Length 406;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 289 CGAACGTTTCG 298
|||||

RESULT 42

US-09-060-756-563/c
; Sequence 563, Application US/09060756
; Patent No. 6183957
; GENERAL INFORMATION:
; APPLICANT: Cole, Stewart
; APPLICANT: Buchrieser-Brosch, Roland
; APPLICANT: Gordon, Stephen
; APPLICANT: Billault, Alain
; TITLE OF INVENTION: METHOD FOR ISOLATING A POLYNUCLEOTIDE OF INTEREST FROM
; TITLE OF INVENTION: THE GENOME OF A MYCOBACTERIUM USING A BAC-BASED DNA
; TITLE OF INVENTION: LIBRARY APPLICATION TO THE DETECTION OF MYCOBACTERIA
; FILE REFERENCE: 3495-0169
; CURRENT APPLICATION NUMBER: US/09/060,756
; CURRENT FILING DATE: 1998-04-16
; NUMBER OF SEQ ID NOS: 743
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 563
; LENGTH: 406
; TYPE: DNA
; ORGANISM: Mycobacterium tuberculosis
; FEATURE:
; NAME/KEY: unsure
; LOCATION: (various positions within the sequence)
; OTHER INFORMATION: applicants are uncertain of bases designated as "n"
US-09-060-756-563

Query Match 100.0%; Score 10; DB 3; Length 406;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 CGAACGTTTCG 10
 Db 298 CGAACGTTTCG 289

RESULT 43
 US-09-670-314-563
 ; Sequence 563, Application US/09670314
 ; Patent No. 6492506
 ; GENERAL INFORMATION:
 ; APPLICANT: Cole, Stewart
 ; APPLICANT: Buchrieser-Brosch, Roland
 ; APPLICANT: Gordon, Stephen
 ; APPLICANT: Billault, Alain
 ; TITLE OF INVENTION: METHOD FOR ISOLATING A POLYNUCLEOTIDE OF INTEREST FROM
 ; TITLE OF INVENTION: THE GENOME OF A MYCOBACTERIUM USING A BAC-BASED DNA
 ; TITLE OF INVENTION: LIBRARY APPLICATION TO THE DETECTION OF MYCOBACTERIA
 ; FILE REFERENCE: 3495-0169
 ; CURRENT APPLICATION NUMBER: US/09/670.314
 ; CURRENT FILING DATE: 2001-01-12
 ; PRIOR APPLICATION NUMBER: 09/060,756
 ; PRIOR FILING DATE: 1998-04-16
 ; NUMBER OF SEQ ID NOS: 743
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 563
 ; LENGTH: 406
 ; TYPE: DNA
 ; ORGANISM: Mycobacterium tuberculosis
 ; FEATURE:
 ; NAME/KEY: unsure
 ; LOCATION: (various positions within the sequence)
 ; OTHER INFORMATION: applicants are uncertain of bases designated as "n"
 US-09-670-314-563

Query Match 100.0%; Score 10; DB 4; Length 406;
 Best Local Similarity 100.0%; Pred. NO. 1.2e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 CGAACGTTTCG 10
 Db 289 CGAACGTTTCG 298

RESULT 44
 US-09-670-314-563/c
 ; Sequence 563, Application US/09670314
 ; Patent No. 6492506
 ; GENERAL INFORMATION:
 ; APPLICANT: Cole, Stewart
 ; APPLICANT: Buchrieser-Brosch, Roland
 ; APPLICANT: Gordon, Stephen
 ; APPLICANT: Billault, Alain
 ; TITLE OF INVENTION: METHOD FOR ISOLATING A POLYNUCLEOTIDE OF INTEREST FROM
 ; TITLE OF INVENTION: THE GENOME OF A MYCOBACTERIUM USING A BAC-BASED DNA
 ; TITLE OF INVENTION: LIBRARY APPLICATION TO THE DETECTION OF MYCOBACTERIA
 ; FILE REFERENCE: 3495-0169
 ; CURRENT APPLICATION NUMBER: US/09/670.314
 ; CURRENT FILING DATE: 2001-01-12
 ; PRIOR APPLICATION NUMBER: 09/060,756
 ; PRIOR FILING DATE: 1998-04-16
 ; NUMBER OF SEQ ID NOS: 743
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 563
 ; LENGTH: 406
 ; TYPE: DNA
 ; ORGANISM: Mycobacterium tuberculosis
 ; FEATURE:
 ; NAME/KEY: unsure
 ; LOCATION: (various positions within the sequence)
 ; OTHER INFORMATION: applicants are uncertain of bases designated as "n"
 US-09-670-314-563

Query Match 100.0%; Score 10; DB 4; Length 406;
 Best Local Similarity 100.0%; Pred. NO. 1.2e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 CGAACGTTTCG 10
 Db 298 CGAACGTTTCG 289

RESULT 45
 US-09-107-433-1794
 ; Sequence 1794, Application US/09107433
 ; Patent No. 6800744
 ; GENERAL INFORMATION:
 ; APPLICANT: Lynn A Doucette-Stamm and David Bush
 ; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID
 ; SEQUENCES RELATING TO STREPTOCOCCUS PNEUMONIAE
 ; THERAPEUTICS
 ; NUMBER OF SEQUENCES: 5206
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: GENOME THERAPEUTICS CORPORATION
 ; STREET: 100 Beaver Street
 ; CITY: Waltham
 ; STATE: Massachusetts
 ; COUNTRY: USA
 ; ZIP: 02354
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: CD-ROM ISO9660
 ; COMPUTER: <Unknown>
 ; OPERATING SYSTEM: <Unknown>
 ; SOFTWARE: <Unknown>
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/09/107.433
 ; FILING DATE: 30-Jun-1998
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: 60/ 085131
 ; FILING DATE: May 12, 1998
 ; APPLICATION NUMBER: 60/051553
 ; FILING DATE: July 2, 1997
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Ariniello, Pamela Deneke
 ; REGISTRATION NUMBER: 40,489
 ; REFERENCE/DOCKET NUMBER: GTC-011
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (781)893-5007
 ; TELEFAX: (781)893-8277
 ; INFORMATION FOR SEQ ID NO: 1794:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 480 base pairs
 ; TYPE: nucleic acid
 ; STRANDEDNESS: double
 ; TOPOLOGY: circular
 ; MOLECULE TYPE: DNA (genomic)
 ; HYPOTHETICAL: NO
 ; ANTI-SENSE: NO
 ; ORIGINAL SOURCE:
 ; ORGANISM: Streptococcus pneumoniae
 ; FEATURE:
 ; NAME/KEY: misc feature
 ; LOCATION: (B) LOCATION 1...480
 ; SEQUENCE DESCRIPTION: SEQ ID NO: 1794:
 US-09-107-433-1794

Query Match 100.0%; Score 10; DB 4; Length 480;
 Best Local Similarity 100.0%; Pred. NO. 1.2e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 CGAACGTTTCG 10
 Db 37 CGAACGTTTCG 46

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RESULT 46
US-09-107-433-1794/c
; Sequence 1794, Application US/09107433
; Patent No. 6800744
; GENERAL INFORMATION:
; APPLICANT: Lynn A Doucette-Stamm and David Bush
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID
; SEQUENCES RELATING TO STREPTOCOCCUS PNEUMONIAE
; THERAPEUTICS
; NUMBER OF SEQUENCES: 5206
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: GENOME THERAPEUTICS CORPORATION
; STREET: 100 Beaver Street
; CITY: Waltham
; STATE: Massachusetts
; COUNTRY: USA
; ZIP: 02354
; COMPUTER READABLE FORM:
; MEDIUM TYPE: CD-ROM ISO9660
; COMPUTER: <Unknown>
; OPERATING SYSTEM: <Unknown>
; SOFTWARE: <Unknown>
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/107.433
; FILING DATE: 30-Jun-1998
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/ 085131
; FILING DATE: May 12, 1998
; APPLICATION NUMBER: 60/051553
; FILING DATE: July 2, 1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Ariniello, Pamela Deneke
; REGISTRATION NUMBER: 40,489
; REFERENCE/DOCKET NUMBER: GTC-011
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (781)893-5007
; TELEFAX: (781)893-8277
; INFORMATION FOR SEQ ID NO: 1794:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 480 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: circular
; MOLECULE TYPE: DNA (genomic)
; HYPOTHETICAL: NO
; ANTI-SENSE: NO
; ORIGINAL SOURCE:
; ORGANISM: Streptococcus pneumoniae
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (B) LOCATION 1...480
; SEQUENCE DESCRIPTION: SEQ ID NO: 1794:
US-09-107-433-1794
Query Match 100.0%; Score 10; DB 4; Length 480;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
Db 46 CGAACGTTTCG 37
RESULT 47
US-09-270-767-30406
; Sequence 30406, Application US/09270767
; Patent No. 6703491
; GENERAL INFORMATION:
; APPLICANT: Homburger et al.
; TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster
; FILE REFERENCE: File Reference: 7326-094
; CURRENT APPLICATION NUMBER: US/09/270.767
; CURRENT FILING DATE: 1999-03-17
; NUMBER OF SEQ ID NOS: 5206
; SOFTWARE: FASTSEQ for Windows Version 4.0
; SEQ ID NO 3503
; LENGTH: 521
; TYPE: DNA
; ORGANISM: Human
US-09-270-767-30406
Query Match 100.0%; Score 10; DB 4; Length 521;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
Db 266 CGAACGTTTCG 275
RESULT 48
US-09-270-767-30406/c
; Sequence 30406, Application US/09270767
; Patent No. 6703491
; GENERAL INFORMATION:
; APPLICANT: Homburger et al.
; TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster
; FILE REFERENCE: File Reference: 7326-094
; CURRENT APPLICATION NUMBER: US/09/270.767
; CURRENT FILING DATE: 1999-03-17
; NUMBER OF SEQ ID NOS: 62517
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 30406
; LENGTH: 508
; TYPE: DNA
; ORGANISM: Drosophila melanogaster
US-09-270-767-30406
Query Match 100.0%; Score 10; DB 4; Length 508;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
Db 275 CGAACGTTTCG 266
RESULT 49
US-09-949-016-3503
; Sequence 3503, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949.016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3503
; LENGTH: 521
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-3503
Query Match 100.0%; Score 10; DB 4; Length 521;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
Db 275 CGAACGTTTCG 266
```


Qy 1 CGAACGTTTCG 10
Db 212 CGAACGTTTCG 221

RESULT 50

US-09-949-016-3503/c
; Sequence 3503, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: C0001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3503
; LENGTH: 521
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-3503

Query Match 100.0%; Score 10; DB 4; Length 521;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 221 CGAACGTTTCG 212

RESULT 51

US-09-222-575-152
; Sequence 152, Application US/09222575
; Patent No. 6387697
; GENERAL INFORMATION:
; APPLICANT: Yugu, Jiang
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; TITLE OF INVENTION: Compositions for the Treatment and Diagnosis of Breast Cancer
; FILE REFERENCE: 210121.470
; CURRENT APPLICATION NUMBER: US/09/222,575
; CURRENT FILING DATE: 1998-12-28
; NUMBER OF SEQ ID NOS: 174
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 152
; LENGTH: 553
; TYPE: DNA
; ORGANISM: Human
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: (293)
; OTHER INFORMATION: Where n is a, c, g or t
; NAME/KEY: modified_base
; LOCATION: (432)
; OTHER INFORMATION: Where n is a, c, g or t
; NAME/KEY: modified_base
; LOCATION: (459)
; OTHER INFORMATION: Where n is a, c, g or t
; NAME/KEY: modified_base
; LOCATION: (481)
; OTHER INFORMATION: Where n is a, c, g or t
; NAME/KEY: modified_base
; LOCATION: (536)
; OTHER INFORMATION: Where n is a, c, g or t
US-09-222-575-152

Query Match 100.0%; Score 10; DB 4; Length 521;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

; LOCATION: (536)
; OTHER INFORMATION: Where n is a, c, g or t
US-09-222-575-152

Query Match 100.0%; Score 10; DB 3; Length 553;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 197 CGAACGTTTCG 206

RESULT 52

US-09-222-575-152/c
; Sequence 152, Application US/09222575
; Patent No. 6387697
; GENERAL INFORMATION:
; APPLICANT: Yugu, Jiang
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; TITLE OF INVENTION: Compositions for the Treatment and Diagnosis of Breast Cancer
; FILE REFERENCE: 210121.470
; CURRENT APPLICATION NUMBER: US/09/222,575
; CURRENT FILING DATE: 1998-12-28
; NUMBER OF SEQ ID NOS: 174
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 152
; LENGTH: 553
; TYPE: DNA
; ORGANISM: Human
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: (293)
; OTHER INFORMATION: Where n is a, c, g or t
; NAME/KEY: modified_base
; LOCATION: (432)
; OTHER INFORMATION: Where n is a, c, g or t
; NAME/KEY: modified_base
; LOCATION: (459)
; OTHER INFORMATION: Where n is a, c, g or t
; NAME/KEY: modified_base
; LOCATION: (481)
; OTHER INFORMATION: Where n is a, c, g or t
; NAME/KEY: modified_base
; LOCATION: (536)
; OTHER INFORMATION: Where n is a, c, g or t
US-09-222-575-152

Query Match 100.0%; Score 10; DB 3; Length 553;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 206 CGAACGTTTCG 197

RESULT 53

US-09-389-681-152
; Sequence 152, Application US/09389681A
; Patent No. 6518237
; GENERAL INFORMATION:
; APPLICANT: Yuqui, Jiang
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
; DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.470C3
; CURRENT APPLICATION NUMBER: US/09/389,681A

; CURRENT FILING DATE: 1999-09-02
; NUMBER OF SEQ ID NOS: 463
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 152
; LENGTH: 553
; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc.feature
; LOCATION: (1)...(553)
; OTHER INFORMATION: n = A,T,C or G
US-09-389-681-152

Query Match 100.0%; Score 10; DB 4; Length 553;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
| | | | | | | | | |
Db 197 CGAACGTTTCG 206

RESULT 54

US-09-389-681-152/c
; Sequence 152, Application US/09389681A
; Patent No. 6518237
; GENERAL INFORMATION:
; APPLICANT: Yuqiu, Jiaqin
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
; TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.470C3
; CURRENT APPLICATION NUMBER: US/09/389.681A
; CURRENT FILING DATE: 1999-09-02
; NUMBER OF SEQ ID NOS: 463
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 152
; LENGTH: 553
; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc.feature
; LOCATION: (1)...(553)
; OTHER INFORMATION: n = A,T,C or G
US-09-389-681-152

Query Match 100.0%; Score 10; DB 4; Length 553;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
| | | | | | | | | |
Db 206 CGAACGTTTCG 197

RESULT 55

US-09-620-405B-152
; Sequence 152, Application US/09620405B
; Patent No. 6528054
; GENERAL INFORMATION:
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; APPLICANT: Hepler, William T.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
; TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER
; FILE REFERENCE: 210121.470C8
; CURRENT APPLICATION NUMBER: US/09/620.405B
; CURRENT FILING DATE: 2000-07-20

; NUMBER OF SEQ ID NOS: 495
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 152
; LENGTH: 553
; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc.feature
; LOCATION: (1)...(553)
; OTHER INFORMATION: n = A,T,C or G
US-09-620-405B-152

Query Match 100.0%; Score 10; DB 4; Length 553;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
| | | | | | | | | |
Db 197 CGAACGTTTCG 206

RESULT 56

US-09-620-405B-152/c
; Sequence 152, Application US/09620405B
; Patent No. 6528054
; GENERAL INFORMATION:
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; APPLICANT: Hepler, William T.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
; TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER
; FILE REFERENCE: 210121.470C8
; CURRENT APPLICATION NUMBER: US/09/620.405B
; CURRENT FILING DATE: 2000-07-20
; NUMBER OF SEQ ID NOS: 495
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 152
; LENGTH: 553
; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc.feature
; LOCATION: (1)...(553)
; OTHER INFORMATION: n = A,T,C or G
US-09-620-405B-152

Query Match 100.0%; Score 10; DB 4; Length 553;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
| | | | | | | | | |
Db 206 CGAACGTTTCG 197

RESULT 57

US-09-339-338-152
; Sequence 152, Application US/09339338A
; Patent No. 6573368
; GENERAL INFORMATION:
; APPLICANT: Yuqiu, Jiaqin
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
; TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.470C2
; CURRENT APPLICATION NUMBER: US/09/339.338A
; CURRENT FILING DATE: 1999-06-23
; NUMBER OF SEQ ID NOS: 315

; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 152
; LENGTH: 553
; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)...(553)
; OTHER INFORMATION: n = A,T,C or G
US-09-339-338-152

Query Match 100.0%; Score 10; DB 4; Length 553;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
|||
Db 197 CGAACGTTTCG 206

RESULT 58

US-09-339-338-152/c
; Sequence 152, Application US/09339338A
; Patent No. 6573368
; GENERAL INFORMATION:
; APPLICANT: Yuqiu, Jiaqiang
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
; TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.470C2
; CURRENT APPLICATION NUMBER: US/09/339.338A
; CURRENT FILING DATE: 1999-06-23
; NUMBER OF SEQ ID NOS: 315
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 152
; LENGTH: 553
; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)...(553)
; OTHER INFORMATION: n = A,T,C or G
US-09-339-338-152

Query Match 100.0%; Score 10; DB 4; Length 553;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
|||
Db 206 CGAACGTTTCG 197

RESULT 59

US-09-433-826B-152
; Sequence 152, Application US/09433826B
; Patent No. 6579973
; GENERAL INFORMATION:
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
; TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.470C4
; CURRENT APPLICATION NUMBER: US/09/433.826B
; CURRENT FILING DATE: 1999-11-03
; NUMBER OF SEQ ID NOS: 474
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 152

; LENGTH: 553
; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)...(553)
; OTHER INFORMATION: n = A,T,C or G
US-09-433-826B-152

Query Match 100.0%; Score 10; DB 4; Length 553;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
|||
Db 197 CGAACGTTTCG 206

RESULT 60

US-09-433-826B-152/c
; Sequence 152, Application US/09433826B
; Patent No. 6579973
; GENERAL INFORMATION:
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
; TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.470C4
; CURRENT APPLICATION NUMBER: US/09/433.826B
; CURRENT FILING DATE: 1999-11-03
; NUMBER OF SEQ ID NOS: 474
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 152
; LENGTH: 553
; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)...(553)
; OTHER INFORMATION: n = A,T,C or G
US-09-433-826B-152

Query Match 100.0%; Score 10; DB 4; Length 553;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
|||
Db 206 CGAACGTTTCG 197

RESULT 61

US-09-604-287A-152
; Sequence 152, Application US/09604287A
; Patent No. 6586572
; GENERAL INFORMATION:
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; APPLICANT: Hepler, William T.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
; TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER
; FILE REFERENCE: 210121.470C7
; CURRENT APPLICATION NUMBER: US/09/604.287A
; CURRENT FILING DATE: 2000-06-22
; NUMBER OF SEQ ID NOS: 489
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 152

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; LENGTH: 553
; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)...(553)
; OTHER INFORMATION: n = A,T,C or G
US-09-604-287A-152

Query Match          100.0%; Score 10; DB 4; Length 553;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTTTCG 10
Db      197 CGAACGTTTCG 206

RESULT 62
US-09-604-287A-152/c
; Sequence 152, Application US/09604287A
; Patent No. 6586572
; GENERAL INFORMATION:
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; APPLICANT: Hepler, William T.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
; FILE REFERENCE: 210121.470C7
; CURRENT APPLICATION NUMBER: US/09/604,287A
; CURRENT FILING DATE: 2000-06-22
; NUMBER OF SEQ ID NOS: 489
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 152
; LENGTH: 553
; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)...(553)
; OTHER INFORMATION: n = A,T,C or G
US-09-604-287A-152

Query Match          100.0%; Score 10; DB 4; Length 553;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTTTCG 10
Db      206 CGAACGTTTCG 197

RESULT 63
US-09-285-480-152
; Sequence 152, Application US/09285480
; Patent No. 6590076
; GENERAL INFORMATION:
; APPLICANT: Yuqiu, Jiang
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; APPLICANT: Hepler, William T.
; TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
; FILE REFERENCE: 210121.470C1
; CURRENT APPLICATION NUMBER: US/09/285,480
; CURRENT FILING DATE: 1999-04-02
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 152
; LENGTH: 553
; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)...(553)
; OTHER INFORMATION: n = A,T,C or G
US-09-285-480-152

Query Match          100.0%; Score 10; DB 4; Length 553;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTTTCG 10
Db      206 CGAACGTTTCG 197

RESULT 64
US-09-285-480-152/c
; Sequence 152, Application US/09285480
; Patent No. 6590076
; GENERAL INFORMATION:
; APPLICANT: Yuqiu, Jiang
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
; FILE REFERENCE: 210121.470C1
; CURRENT APPLICATION NUMBER: US/09/285,480
; CURRENT FILING DATE: 1999-04-02
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 152
; LENGTH: 553
; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)...(553)
; OTHER INFORMATION: n = A,T,C or G
US-09-285-480-152

Query Match          100.0%; Score 10; DB 4; Length 553;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTTTCG 10
Db      206 CGAACGTTTCG 197

RESULT 65
US-09-834-759-152
; Sequence 152, Application US/09834759
; Patent No. 6680197
; GENERAL INFORMATION:
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; APPLICANT: Hepler, William T.
; APPLICANT: Henderson, Robert A.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
; FILE REFERENCE: 210121.470C9
; CURRENT APPLICATION NUMBER: US/09/834,759
; CURRENT FILING DATE: 2001-04-13
; NUMBER OF SEQ ID NOS: 547
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 152
; LENGTH: 553
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; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)...(553)
; OTHER INFORMATION: n = A,T,C or G
US-09-285-480-152

Query Match          100.0%; Score 10; DB 4; Length 553;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTTTCG 10
Db      197 CGAACGTTTCG 206

RESULT 64
US-09-285-480-152/c
; Sequence 152, Application US/09285480
; Patent No. 6590076
; GENERAL INFORMATION:
; APPLICANT: Yuqiu, Jiang
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
; FILE REFERENCE: 210121.470C1
; CURRENT APPLICATION NUMBER: US/09/285,480
; CURRENT FILING DATE: 1999-04-02
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 152
; LENGTH: 553
; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)...(553)
; OTHER INFORMATION: n = A,T,C or G
US-09-285-480-152

Query Match          100.0%; Score 10; DB 4; Length 553;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTTTCG 10
Db      206 CGAACGTTTCG 197

RESULT 65
US-09-834-759-152
; Sequence 152, Application US/09834759
; Patent No. 6680197
; GENERAL INFORMATION:
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; APPLICANT: Hepler, William T.
; APPLICANT: Henderson, Robert A.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
; FILE REFERENCE: 210121.470C9
; CURRENT APPLICATION NUMBER: US/09/834,759
; CURRENT FILING DATE: 2001-04-13
; NUMBER OF SEQ ID NOS: 547
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 152
; LENGTH: 553
```

```
; ; TYPE: DNA
; ; ORGANISM: Homo sapien
; ; FEATURE:
; ; NAME/KEY: misc feature
; ; LOCATION: (1)...(553)
; ; OTHER INFORMATION: n = A,T,C or G
US-09-834-759-152

Query Match      100.0%; Score 10; DB 4; Length 553;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 197 CGAACGTTTCG 206

RESULT 66
US-09-834-759-152/c
; Sequence 152, Application US/09834759
; Patent No. 6680197
; GENERAL INFORMATION:
; APPLICANT: Jiang, Yugui
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; APPLICANT: Henderson, Robert A.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
; FILE REFERENCE: 210121.470C9
; CURRENT APPLICATION NUMBER: US/09/834.759
; CURRENT FILING DATE: 2001-04-13
; NUMBER OF SEQ ID NOS: 547
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 152
; LENGTH: 553
; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)...(553)
; OTHER INFORMATION: n = A,T,C or G
US-09-834-759-152

Query Match      100.0%; Score 10; DB 4; Length 553;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 206 CGAACGTTTCG 197

RESULT 67
US-09-834-759-152
; Sequence 152, Application US/09590751A
; Patent No. 6756477
; GENERAL INFORMATION:
; APPLICANT: Yuqui, Jiang
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; TITLE OF INVENTION: COMPOSITIONS FOR THE THERAPY AND
; FILE REFERENCE: 210121.470C6
; CURRENT APPLICATION NUMBER: US/09/590,751A
; CURRENT FILING DATE: 2000-06-08
; NUMBER OF SEQ ID NOS: 479
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 152
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; ; LENGTH: 553
; ; TYPE: DNA
; ; ORGANISM: Homo sapien
; ; FEATURE:
; ; NAME/KEY: misc feature
; ; LOCATION: (1)...(553)
; ; OTHER INFORMATION: n = A,T,C or G
US-09-590-751A-152

Query Match      100.0%; Score 10; DB 4; Length 553;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 197 CGAACGTTTCG 206

RESULT 68
US-09-590-751A-152/c
; Sequence 152, Application US/09590751A
; Patent No. 6756477
; GENERAL INFORMATION:
; APPLICANT: Yuqui, Jiang
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; TITLE OF INVENTION: COMPOSITIONS FOR THE THERAPY AND
; FILE REFERENCE: 210121.470C6
; CURRENT APPLICATION NUMBER: US/09/590,751A
; CURRENT FILING DATE: 2000-06-08
; NUMBER OF SEQ ID NOS: 479
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 152
; LENGTH: 553
; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)...(553)
; OTHER INFORMATION: n = A,T,C or G
US-09-590-751A-152

Query Match      100.0%; Score 10; DB 4; Length 553;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 206 CGAACGTTTCG 197

RESULT 69
US-09-551-621-152
; Sequence 152, Application US/09551621
; Patent No. 6825175
; GENERAL INFORMATION:
; APPLICANT: Yuqui, Jiang
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
; FILE REFERENCE: 210121.470C5
; CURRENT APPLICATION NUMBER: US/09/551,621
; CURRENT FILING DATE: 2000-04-17
; NUMBER OF SEQ ID NOS: 479
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 152
; LENGTH: 553
```

```
; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(553)
; OTHER INFORMATION: n = A,T,C or G
US-09-551-621-152

Query Match      100.0%; Score 10; DB 4; Length 553;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 CGAACGTTTCG 10
Db      197 CGAACGTTTCG 206

RESULT 70
US-09-551-621-152/c
; Sequence 152, Application US/09551621
; Patent No. 6825175
; GENERAL INFORMATION:
; APPLICANT: Yuqiu, Jiang
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
; FILE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.470C5
; CURRENT APPLICATION NUMBER: US/09/551.621
; CURRENT FILING DATE: 2000-04-17
; NUMBER OF SEQ ID NOS: 479
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 152
; LENGTH: 553
; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(553)
; OTHER INFORMATION: n = A,T,C or G
US-09-551-621-152

Query Match      100.0%; Score 10; DB 4; Length 553;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 CGAACGTTTCG 10
Db      206 CGAACGTTTCG 197

RESULT 71
US-09-621-976-3556
; Sequence 3556, Application US/09621976
; Patent No. 6639063
; GENERAL INFORMATION:
; APPLICANT: Dumas Milne Edwards, J.B.
; APPLICANT: Jobert, S.
; APPLICANT: Giordano, J.Y.
; TITLE OF INVENTION: ESTs and Encoded Human Proteins.
; FILE REFERENCE: GENSET.054PR2
; CURRENT APPLICATION NUMBER: US/09/621.976
; CURRENT FILING DATE: 2000-07-21
; NUMBER OF SEQ ID NOS: 19335
; SOFTWARE: Patent.pm
; SEQ ID NO 3556
; LENGTH: 581
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
```

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; LOCATION: 185..448
US-09-621-976-3556

Query Match      100.0%; Score 10; DB 4; Length 581;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 CGAACGTTTCG 10
Db      45 CGAACGTTTCG 54

RESULT 72
US-09-621-976-3556/c
; Sequence 3556, Application US/09621976
; Patent No. 6639063
; GENERAL INFORMATION:
; APPLICANT: Dumas Milne Edwards, J.B.
; APPLICANT: Jobert, S.
; APPLICANT: Giordano, J.Y.
; TITLE OF INVENTION: ESTs and Encoded Human Proteins.
; FILE REFERENCE: GENSET.054PR2
; CURRENT APPLICATION NUMBER: US/09/621.976
; CURRENT FILING DATE: 2000-07-21
; NUMBER OF SEQ ID NOS: 19335
; SOFTWARE: Patent.pm
; SEQ ID NO 3556
; LENGTH: 581
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 185..448
US-09-621-976-3556

Query Match      100.0%; Score 10; DB 4; Length 581;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 CGAACGTTTCG 10
Db      54 CGAACGTTTCG 45

RESULT 73
US-09-270-767-26201
; Sequence 26201, Application US/09270767
; Patent No. 6703491
; GENERAL INFORMATION:
; APPLICANT: Homburger et al.
; TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster
; FILE REFERENCE: File Reference: 7326-094
; CURRENT APPLICATION NUMBER: US/09/270.767
; CURRENT FILING DATE: 1999-03-17
; NUMBER OF SEQ ID NOS: 62517
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 26201
; LENGTH: 581
; TYPE: DNA
; ORGANISM: Drosophila melanogaster
US-09-270-767-26201

Query Match      100.0%; Score 10; DB 4; Length 581;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 CGAACGTTTCG 10
Db      266 CGAACGTTTCG 275

RESULT 74
US-09-270-767-26201/c
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; Sequence 26201, Application US/09270767
; Patent No. 6703491
; GENERAL INFORMATION:
; APPLICANT: Homburger et al.
; TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster
; FILE REFERENCE: File Reference: 7326-094
; CURRENT APPLICATION NUMBER: US/09/270,767
; CURRENT FILING DATE: 1999-03-17
; NUMBER OF SEQ ID NOS: 62517
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 26201
; LENGTH: 581
; TYPE: DNA
; ORGANISM: Drosophila melanogaster
US-09-270-767-26201

Query Match      100.0%; Score 10; DB 4; Length 581;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTTTCG 10
      |||||
Db      275 CGAACGTTTCG 266

RESULT 75
US-09-252-991A-12907
; Sequence 12907, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 12907
; LENGTH: 582
; TYPE: DNA
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-12907

Query Match      100.0%; Score 10; DB 4; Length 582;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTTTCG 10
      |||||
Db      360 CGAACGTTTCG 369

RESULT 76
US-09-252-991A-12907/c
; Sequence 12907, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 12907

; Sequence 26201, Application US/09270767
; Patent No. 6703491
; GENERAL INFORMATION:
; APPLICANT: Homburger et al.
; TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster
; FILE REFERENCE: File Reference: 7326-094
; CURRENT APPLICATION NUMBER: US/09/270,767
; CURRENT FILING DATE: 1999-03-17
; NUMBER OF SEQ ID NOS: 62517
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 26201
; LENGTH: 581
; TYPE: DNA
; ORGANISM: Drosophila melanogaster
US-09-270-767-26201

Query Match      100.0%; Score 10; DB 4; Length 581;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTTTCG 10
      |||||
Db      275 CGAACGTTTCG 266

RESULT 75
US-09-252-991A-12907
; Sequence 12907, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 12907
; LENGTH: 582
; TYPE: DNA
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-12907

Query Match      100.0%; Score 10; DB 4; Length 582;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTTTCG 10
      |||||
Db      360 CGAACGTTTCG 369

RESULT 76
US-09-252-991A-12907/c
; Sequence 12907, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 12907

; Sequence 1408, Application US/09489039A
; Patent No. 6610836
; GENERAL INFORMATION:
; APPLICANT: Gary Breton et. al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO KLEBSIELLA
; FILE REFERENCE: 2709.2004001
; CURRENT APPLICATION NUMBER: US/09/489,039A
; CURRENT FILING DATE: 2000-01-27
; PRIOR APPLICATION NUMBER: US 60/117,747
; PRIOR FILING DATE: 1999-01-29
; NUMBER OF SEQ ID NOS: 14342
; SEQ ID NO 1408
; LENGTH: 597
; TYPE: DNA
; ORGANISM: Klebsiella pneumoniae
US-09-489-039A-1408/c

Query Match      100.0%; Score 10; DB 4; Length 597;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTTTCG 10
      |||||
Db      582 CGAACGTTTCG 591

RESULT 78
US-09-489-039A-1408/c
; Sequence 1408, Application US/09489039A
; Patent No. 6610836
; GENERAL INFORMATION:
; APPLICANT: Gary Breton et. al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO KLEBSIELLA
; FILE REFERENCE: 2709.2004001
; CURRENT APPLICATION NUMBER: US/09/489,039A
; CURRENT FILING DATE: 2000-01-27
; PRIOR APPLICATION NUMBER: US 60/117,747
; PRIOR FILING DATE: 1999-01-29
; NUMBER OF SEQ ID NOS: 14342
; SEQ ID NO 1408
; LENGTH: 597
; TYPE: DNA
; ORGANISM: Klebsiella pneumoniae
US-09-489-039A-1408

Query Match      100.0%; Score 10; DB 4; Length 597;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTTTCG 10
      |||||
Db      591 CGAACGTTTCG 582

RESULT 79
US-09-489-039A-1408
; Sequence 1408, Application US/09489039A
; Patent No. 6610836
; GENERAL INFORMATION:
; APPLICANT: Gary Breton et. al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO KLEBSIELLA
; FILE REFERENCE: 2709.2004001
; CURRENT APPLICATION NUMBER: US/09/489,039A
; CURRENT FILING DATE: 2000-01-27
; PRIOR APPLICATION NUMBER: US 60/117,747
; PRIOR FILING DATE: 1999-01-29
; NUMBER OF SEQ ID NOS: 14342
; SEQ ID NO 1408
; LENGTH: 597
; TYPE: DNA
; ORGANISM: Klebsiella pneumoniae
US-09-489-039A-1408

Query Match      100.0%; Score 10; DB 4; Length 597;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTTTCG 10
      |||||
Db      591 CGAACGTTTCG 582

RESULT 79
US-09-489-039A-1408
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```
US-09-489-039A-4244
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 185..448
; US-09-621-976-3555

Query Match      100.0%; Score 10; DB 4; Length 664;
Best Local Similarity 100.0%; Pred. No. 1.2e+03; Indels 0; Gaps 0;
Matches 10; Conservative 0; Mismatches 0;

QY      1 CGAACGTTTCG 10
      |||||
Db      45 CGAACGTTTCG 54

RESULT 82
US-09-621-976-3555/c
; Sequence 3555, Application US/09621976
; Patent No. 6639063
; GENERAL INFORMATION:
; APPLICANT: Dumas Milne Edwards, J.B.
; APPLICANT: Jobert, S.
; TITLE OF INVENTION: ESTs and Encoded Human Proteins.
; FILE REFERENCE: GENSET.054PR2
; CURRENT APPLICATION NUMBER: US/09/621,976
; CURRENT FILING DATE: 2000-07-21
; NUMBER OF SEQ ID NOS: 19335
; SOFTWARE: Patent.pm
; SEQ ID NO 3555
; LENGTH: 664
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 185..448
; US-09-621-976-3555

Query Match      100.0%; Score 10; DB 4; Length 664;
Best Local Similarity 100.0%; Pred. No. 1.2e+03; Indels 0; Gaps 0;
Matches 10; Conservative 0; Mismatches 0;

QY      1 CGAACGTTTCG 10
      |||||
Db      54 CGAACGTTTCG 45

RESULT 83
US-09-270-767-14856
; Sequence 14856, Application US/09270767
; Patent No. 6703491
; GENERAL INFORMATION:
; APPLICANT: Homburger et al.
; TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster
; FILE REFERENCE: File Reference: 7326.094
; CURRENT APPLICATION NUMBER: US/09/270,767
; CURRENT FILING DATE: 1999-03-17
; NUMBER OF SEQ ID NOS: 62517
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 14856
; LENGTH: 729
; TYPE: DNA
; ORGANISM: Drosophila melanogaster
; US-09-270-767-14856

Query Match      100.0%; Score 10; DB 4; Length 729;
Best Local Similarity 100.0%; Pred. No. 1.2e+03; Indels 0; Gaps 0;
Matches 10; Conservative 0; Mismatches 0;

QY      1 CGAACGTTTCG 10
      |||||
Db      654 CGAACGTTTCG 663
```

```
US-09-489-039A-4244
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 185..448
; US-09-621-976-3555

Query Match      100.0%; Score 10; DB 4; Length 664;
Best Local Similarity 100.0%; Pred. No. 1.2e+03; Indels 0; Gaps 0;
Matches 10; Conservative 0; Mismatches 0;

QY      1 CGAACGTTTCG 10
      |||||
Db      45 CGAACGTTTCG 54

RESULT 82
US-09-621-976-3555/c
; Sequence 3555, Application US/09621976
; Patent No. 6639063
; GENERAL INFORMATION:
; APPLICANT: Dumas Milne Edwards, J.B.
; APPLICANT: Jobert, S.
; TITLE OF INVENTION: ESTs and Encoded Human Proteins.
; FILE REFERENCE: GENSET.054PR2
; CURRENT APPLICATION NUMBER: US/09/621,976
; CURRENT FILING DATE: 2000-07-21
; NUMBER OF SEQ ID NOS: 19335
; SOFTWARE: Patent.pm
; SEQ ID NO 3555
; LENGTH: 664
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 185..448
; US-09-621-976-3555

Query Match      100.0%; Score 10; DB 4; Length 664;
Best Local Similarity 100.0%; Pred. No. 1.2e+03; Indels 0; Gaps 0;
Matches 10; Conservative 0; Mismatches 0;

QY      1 CGAACGTTTCG 10
      |||||
Db      54 CGAACGTTTCG 45

RESULT 83
US-09-270-767-14856
; Sequence 14856, Application US/09270767
; Patent No. 6703491
; GENERAL INFORMATION:
; APPLICANT: Homburger et al.
; TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster
; FILE REFERENCE: File Reference: 7326.094
; CURRENT APPLICATION NUMBER: US/09/270,767
; CURRENT FILING DATE: 1999-03-17
; NUMBER OF SEQ ID NOS: 62517
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 14856
; LENGTH: 729
; TYPE: DNA
; ORGANISM: Drosophila melanogaster
; US-09-270-767-14856

Query Match      100.0%; Score 10; DB 4; Length 729;
Best Local Similarity 100.0%; Pred. No. 1.2e+03; Indels 0; Gaps 0;
Matches 10; Conservative 0; Mismatches 0;

QY      1 CGAACGTTTCG 10
      |||||
Db      654 CGAACGTTTCG 663
```


RESULT 84
US-09-270-767-14856/c
; Sequence 14856, Application US/09270767
; Patent No. 6703491
; GENERAL INFORMATION:
; APPLICANT: Homburger et al.
; TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster
; FILE REFERENCE: File Reference: 7326-094
; CURRENT APPLICATION NUMBER: US/09/270,767
; CURRENT FILING DATE: 1999-03-17
; NUMBER OF SEQ ID NOS: 62517
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 14856
; LENGTH: 729
; TYPE: DNA
; ORGANISM: Drosophila melanogaster
US-09-270-767-14856

Query Match 100.0%; Score 10; DB 4; Length 729;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 663 CGAACGTTTCG 654

RESULT 85
US-08-469-260A-22
; Sequence 22, Application US/08469260A
; Patent No. 6451578
; GENERAL INFORMATION:
; APPLICANT: JOHN N. SIMONS
; APPLICANT: TAMI J. PILOT-MATIAS
; APPLICANT: GEORGE J. DAWSON
; APPLICANT: GEORGE G. SCHLAUDER
; APPLICANT: SURESH M. DESAI
; APPLICANT: THOMAS P. LEARY
; APPLICANT: ANTHONY SCOTT MUERHOFF
; APPLICANT: JAMES C. ERKER
; APPLICANT: SHERI L. BUIJK
; APPLICANT: ISA K. MUSHAWAR
; TITLE OF INVENTION: NON-A, NON-B, NON-C, NON-D, NON-E HEPATITIS
; TITLE OF INVENTION: REAGENTS AND METHODS FOR THEIR USE
; NUMBER OF SEQUENCES: 716
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: ABBOTT LABORATORIES D377/AP6D
; STREET: 100 ABBOTT PARK ROAD
; CITY: ABBOTT PARK
; STATE: IL
; COUNTRY: USA
; ZIP: 60064-3500
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/469,260A
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/424,550
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: FOREMSKI, PRISCILLA E.
; REGISTRATION NUMBER: 33,207
; REFERENCE/DOCKET NUMBER: 5527.PC.01
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 708-937-6365
; TELEFAX: 708-938-2623

; INFORMATION FOR SEQ ID NO: 22:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 737 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-469-260A-22
Query Match 100.0%; Score 10; DB 3; Length 737;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
Db 296 CGAACGTTTCG 305
RESULT 86
US-08-469-260A-22/c
; Sequence 22, Application US/08469260A
; Patent No. 6451578
; GENERAL INFORMATION:
; APPLICANT: JOHN N. SIMONS
; APPLICANT: TAMI J. PILOT-MATIAS
; APPLICANT: GEORGE J. DAWSON
; APPLICANT: GEORGE G. SCHLAUDER
; APPLICANT: SURESH M. DESAI
; APPLICANT: THOMAS P. LEARY
; APPLICANT: ANTHONY SCOTT MUERHOFF
; APPLICANT: JAMES C. ERKER
; APPLICANT: SHERI L. BUIJK
; APPLICANT: ISA K. MUSHAWAR
; TITLE OF INVENTION: NON-A, NON-B, NON-C, NON-D, NON-E HEPATITIS
; TITLE OF INVENTION: REAGENTS AND METHODS FOR THEIR USE
; NUMBER OF SEQUENCES: 716
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: ABBOTT LABORATORIES D377/AP6D
; STREET: 100 ABBOTT PARK ROAD
; CITY: ABBOTT PARK
; STATE: IL
; COUNTRY: USA
; ZIP: 60064-3500
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/469,260A
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/424,550
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: FOREMSKI, PRISCILLA E.
; REGISTRATION NUMBER: 33,207
; REFERENCE/DOCKET NUMBER: 5527.PC.01
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 708-937-6365
; TELEFAX: 708-938-2623
; INFORMATION FOR SEQ ID NO: 22:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 737 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-469-260A-22
Query Match 100.0%; Score 10; DB 3; Length 737;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTGC 10
|||||
Db 305 CGAACGTTGC 296

RESULT 87

US-08-488-446-22
; Sequence 22, Application US/08488446
; Patent No. 655898
; GENERAL INFORMATION:
; APPLICANT: JOHN N. SIMONS
; APPLICANT: TAMI J. PILOT-MATIAS
; APPLICANT: GEORGE J. DAWSON
; APPLICANT: GEORGE G. SCHLAUDER
; APPLICANT: SURESH M. DESAI
; APPLICANT: THOMAS P. LEARY
; APPLICANT: ANTHONY SCOTT MUERHOFF
; APPLICANT: JAMES C. ERKER
; APPLICANT: SHERI L. BUIJK
; APPLICANT: ISA K. MUSHAWAR
; TITLE OF INVENTION: NON-A, NON-B. NON-C, NON-D, NON-E HEPATITIS
; TITLE OF INVENTION: REAGENTS AND METHODS FOR THEIR USE
; NUMBER OF SEQUENCES: 716
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: ABBOTT LABORATORIES D377/AP6D
; STREET: 100 ABBOTT PARK ROAD
; CITY: ABBOTT PARK
; STATE: IL
; COUNTRY: USA
; ZIP: 60064-3500
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/488,446
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/424,550
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: FOREMSKI, PRISCILLA E.
; REGISTRATION NUMBER: 33,207
; REFERENCE/DOCKET NUMBER: 5527.PC.01
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 708-937-6365
; TELEFAX: 708-938-2623
; INFORMATION FOR SEQ ID NO: 22:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 737 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-488-446-22

Query Match 100.0%; Score 10; DB 4; Length 737;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTGC 10
|||||
Db 296 CGAACGTTGC 305

RESULT 88

US-08-488-446-22/c
; Sequence 22, Application US/08488446
; Patent No. 655898

; GENERAL INFORMATION:
; APPLICANT: JOHN N. SIMONS
; APPLICANT: TAMI J. PILOT-MATIAS
; APPLICANT: GEORGE J. DAWSON
; APPLICANT: GEORGE G. SCHLAUDER
; APPLICANT: SURESH M. DESAI
; APPLICANT: THOMAS P. LEARY
; APPLICANT: ANTHONY SCOTT MUERHOFF
; APPLICANT: JAMES C. ERKER
; APPLICANT: SHERI L. BUIJK
; APPLICANT: ISA K. MUSHAWAR
; TITLE OF INVENTION: NON-A, NON-B. NON-C, NON-D, NON-E HEPATITIS
; TITLE OF INVENTION: REAGENTS AND METHODS FOR THEIR USE
; NUMBER OF SEQUENCES: 716
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: ABBOTT LABORATORIES D377/AP6D
; STREET: 100 ABBOTT PARK ROAD
; CITY: ABBOTT PARK
; STATE: IL
; COUNTRY: USA
; ZIP: 60064-3500
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/488,446
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/424,550
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: FOREMSKI, PRISCILLA E.
; REGISTRATION NUMBER: 33,207
; REFERENCE/DOCKET NUMBER: 5527.PC.01
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 708-937-6365
; TELEFAX: 708-938-2623
; INFORMATION FOR SEQ ID NO: 22:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 737 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-488-446-22

Query Match 100.0%; Score 10; DB 4; Length 737;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTGC 10
|||||
Db 305 CGAACGTTGC 296

RESULT 89

US-08-467-344A-22
; Sequence 22, Application US/08467344A
; Patent No. 6586568
; GENERAL INFORMATION:
; APPLICANT: JOHN N. SIMONS
; APPLICANT: TAMI J. PILOT-MATIAS
; APPLICANT: GEORGE J. DAWSON
; APPLICANT: GEORGE G. SCHLAUDER
; APPLICANT: SURESH M. DESAI
; APPLICANT: THOMAS P. LEARY
; APPLICANT: ANTHONY SCOTT MUERHOFF
; APPLICANT: JAMES C. ERKER
; APPLICANT: SHERI L. BUIJK
; APPLICANT: ISA K. MUSHAWAR

;; TITLE OF INVENTION: NON-A, NON-B, NON-C, NON-D, NON-E HEPATITIS
;; REAGENTS AND METHODS FOR THEIR USE
;;
;; NUMBER OF SEQUENCES: 716
;; CORRESPONDENCE ADDRESS:
;; ADDRESSEE: ABBOTT LABORATORIES D377/AP6D
;; STREET: 100 ABBOTT PARK ROAD
;; CITY: ABBOTT PARK
;; STATE: IL
;; COUNTRY: USA
;; ZIP: 60064-3500
;;
;; COMPUTER READABLE FORM:
;; MEDIUM TYPE: Floppy disk
;; COMPUTER: IBM PC compatible
;; OPERATING SYSTEM: PC-DOS/MS-DOS
;; SOFTWARE: PatentIn Release #1.0, Version #1.25
;; CURRENT APPLICATION NUMBER: US/08/467,344A
;; FILING DATE: 07-Jun-1995
;; CLASSIFICATION: <Unknown>
;;
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: 08/424,550
;; FILING DATE: <Unknown>
;; ATTORNEY/AGENT INFORMATION:
;; NAME: FOREMSKI, PRISCILLA E.
;; REGISTRATION NUMBER: 33,207
;; REFERENCE/DOCKET NUMBER: 5527.PC.01
;; TELECOMMUNICATION INFORMATION:
;; TELEPHONE: 708-937-6365
;; TELEFAX: 708-938-2623
;;
;; INFORMATION FOR SEQ ID NO: 22:
;; SEQUENCE CHARACTERISTICS:
;; LENGTH: 737 base pairs
;; TYPE: nucleic acid
;; STRANDEDNESS: single
;; TOPOLOGY: linear
;; MOLECULE TYPE: DNA (genomic)
;; SEQUENCE DESCRIPTION: SEQ ID NO: 22:
US-08-467-344A-22

Query Match 100.0%; Score 10; DB 4; Length 737;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTG 10
Db 296 CGAACGTTG 305

RESULT 90
US-08-467-344A-22/c
; Sequence 22, Application US/08467344A
; Patent No. 6586568
; GENERAL INFORMATION:
; APPLICANT: JOHN N. SIMONS
; TAMI J. PILOT-MATIAS
; GEORGE J. DAWSON
; GEORGE G. SCHLAUDER
; SURESH M. DESAI
; THOMAS P. LEARY
; ANTHONY SCOTT MUERHOFF
; JAMES C. ERKER
; SHERI L. BUIJK
; ISA K. MUSHAWAR
; TITLE OF INVENTION: NON-A, NON-B, NON-C, NON-D, NON-E HEPATITIS
; REAGENTS AND METHODS FOR THEIR USE
; NUMBER OF SEQUENCES: 716
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: ABBOTT LABORATORIES D377/AP6D
; STREET: 100 ABBOTT PARK ROAD
; CITY: ABBOTT PARK
; STATE: IL
; COUNTRY: USA
; ZIP: 60064-3500

;; COMPUTER READABLE FORM:
;; MEDIUM TYPE: Floppy disk
;; COMPUTER: IBM PC compatible
;; OPERATING SYSTEM: PC-DOS/MS-DOS
;; SOFTWARE: PatentIn Release #1.0, Version #1.25
;; CURRENT APPLICATION NUMBER: US/08/467,344A
;; FILING DATE: 07-Jun-1995
;; CLASSIFICATION: <Unknown>
;;
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: 08/424,550
;; FILING DATE: <Unknown>
;; ATTORNEY/AGENT INFORMATION:
;; NAME: FOREMSKI, PRISCILLA E.
;; REGISTRATION NUMBER: 33,207
;; REFERENCE/DOCKET NUMBER: 5527.PC.01
;; TELECOMMUNICATION INFORMATION:
;; TELEPHONE: 708-937-6365
;; TELEFAX: 708-938-2623
;;
;; INFORMATION FOR SEQ ID NO: 22:
;; SEQUENCE CHARACTERISTICS:
;; LENGTH: 737 base pairs
;; TYPE: nucleic acid
;; STRANDEDNESS: single
;; TOPOLOGY: linear
;; MOLECULE TYPE: DNA (genomic)
;; SEQUENCE DESCRIPTION: SEQ ID NO: 22:
US-08-467-344A-22

Query Match 100.0%; Score 10; DB 4; Length 737;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTG 10
Db 305 CGAACGTTG 296

RESULT 91
US-08-424-550B-22
; Sequence 22, Application US/08424550B
; Patent No. 6720166
; GENERAL INFORMATION:
; APPLICANT: JOHN N. SIMONS
; TAMI J. PILOT-MATIAS
; GEORGE J. DAWSON
; GEORGE G. SCHLAUDER
; SURESH M. DESAI
; THOMAS P. LEARY
; ANTHONY SCOTT MUERHOFF
; JAMES C. ERKER
; SHERI L. BUIJK
; ISA K. MUSHAWAR
; TITLE OF INVENTION: NON-A, NON-B, NON-C, NON-D, NON-E HEPATITIS
; REAGENTS AND METHODS FOR THEIR USE
; NUMBER OF SEQUENCES: 716
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: ABBOTT LABORATORIES D377/AP6D
; STREET: 100 ABBOTT PARK ROAD
; CITY: ABBOTT PARK
; STATE: IL
; COUNTRY: USA
; ZIP: 60064-3500
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/424,550B
; FILING DATE:
; CLASSIFICATION: 435435
; ATTORNEY/AGENT INFORMATION:

; NAME: POREBSKI, PRISCILLA E.
; REGISTRATION NUMBER: 33,207
; REFERENCE/DOCKET NUMBER: 5527.PC.01
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 708-937-6365
; TELEFAX: 708-938-2623
; INFORMATION FOR SEQ ID NO: 22:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 737 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-424-550B-22

Query Match 100.0%; Score 10; DB 4; Length 737;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 296 CGAACGTTTCG 305

RESULT 92

US-08-424-550B-22/c
; Sequence 22, Application US/08424550B
; Patent No. 6720166
; GENERAL INFORMATION:

; APPLICANT: JOHN N. SIMONS
; APPLICANT: TAMI J. PILOT-MATIAS
; APPLICANT: GEORGE J. DAWSON
; APPLICANT: GEORGE G. SCHLAUDER
; APPLICANT: SURESH M. DESAI
; APPLICANT: THOMAS P. LEARY
; APPLICANT: ANTHONY SCOTT MUEHRHOFF
; APPLICANT: JAMES C. ERKER
; APPLICANT: SHERI L. RUIJK
; APPLICANT: ISA K. MUSHAWAR
; TITLE OF INVENTION: NON-A, NON-B, NON-C, NON-D, NON-E HEPATITIS
; TITLE OF INVENTION: REAGENTS AND METHODS FOR THEIR USE
; NUMBER OF SEQUENCES: 716
; CORRESPONDENCE ADDRESS:

; ADDRESSEE: ABBOTT LABORATORIES D377/AP6D
; STREET: 100 ABBOTT PARK ROAD
; CITY: ABBOTT PARK
; STATE: IL
; COUNTRY: USA
; ZIP: 60064-3500

; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/424,550B
; FILING DATE:

; CLASSIFICATION: 435435
; ATTORNEY/AGENT INFORMATION:
; NAME: POREBSKI, PRISCILLA E.
; REGISTRATION NUMBER: 33,207
; REFERENCE/DOCKET NUMBER: 5527.PC.01

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: 708-937-6365
; TELEFAX: 708-938-2623

; INFORMATION FOR SEQ ID NO: 22:

; SEQUENCE CHARACTERISTICS:
; LENGTH: 737 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-424-550B-22

Query Match 100.0%; Score 10; DB 4; Length 737;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 305 CGAACGTTTCG 296

RESULT 93

US-09-107-532A-1566
; Sequence 1566, Application US/09107532A
; Patent No. 6583275
; GENERAL INFORMATION:

; APPLICANT: Lynn A Doucette-Stamm and David Bush
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO
; ENTEROCOCCUS FAECIUM FOR DIAGNOSTICS AND THERAPEUTICS
; NUMBER OF SEQUENCES: 7310
; CORRESPONDENCE ADDRESS:

; ADDRESSEE: GENOME THERAPEUTICS CORPORATION
; STREET: 100 Beaver Street
; CITY: Waltham
; STATE: Massachusetts
; COUNTRY: USA
; ZIP: 02354

; COMPUTER READABLE FORM:
; MEDIUM TYPE: CD-ROM ISO9660
; COMPUTER: PC
; OPERATING SYSTEM: <Unknown>
; SOFTWARE: ASCII

; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/107,532A
; FILING DATE: 30-Jun-1998
; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: 60/085,598
; FILING DATE: 14 May 1998
; APPLICATION NUMBER: 60/051571

; FILING DATE: July 2, 1997

; ATTORNEY/AGENT INFORMATION:

; NAME: Ariniello, Pamela Deneke
; REGISTRATION NUMBER: 40,489

; REFERENCE/DOCKET NUMBER: GTC-012

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (781)893-5007

; TELEFAX: (781)893-8277

; INFORMATION FOR SEQ ID NO: 1566:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 813 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: double

; TOPOLOGY: circular

; MOLECULE TYPE: DNA (genomic)

; HYPOTHETICAL: NO

; ANTI-SENSE: NO

; ORIGINAL SOURCE:

; ORGANISM: Enterococcus faecium

; FEATURE:

; NAME/KEY: misc feature

; LOCATION: (B) LOCATION 1...813

; SEQUENCE DESCRIPTION: SEQ ID NO: 1566:

US-09-107-532A-1566

Query Match 100.0%; Score 10; DB 4; Length 813;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 243 CGAACGTTTCG 252

RESULT 94

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US-09-107-532A-1566/c
; Sequence 1566, Application US/09107532A
; Patent No. 6583275
; GENERAL INFORMATION:
; APPLICANT: Lynn A Doucette-Stamm and David Bush
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO
; ENTEROCOCCUS FAECIUM FOR DIAGNOSTICS AND THERAPEUTICS
; NUMBER OF SEQUENCES: 7310
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: GENOME THERAPEUTICS CORPORATION
; STREET: 100 Beaver Street
; CITY: Waltham
; STATE: Massachusetts
; COUNTRY: USA
; ZIP: 02354
; COMPUTER READABLE FORM:
; MEDIUM TYPE: CD-ROM ISO9660
; COMPUTER: PC
; OPERATING SYSTEM: <unknown>
; SOFTWARE: ASCII
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/107,532A
; FILING DATE: 30-Jun-1998
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/085,598
; FILING DATE: 14 May 1998
; APPLICATION NUMBER: 60/051571
; FILING DATE: July 2, 1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Ariniello, Pamela Deneke
; REGISTRATION NUMBER: 40,489
; REFERENCE/DOCKET NUMBER: GTC-012
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (781)893-5007
; TELEFAX: (781)893-8277
; INFORMATION FOR SEQ ID NO: 1566:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 813 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: circular
; MOLECULE TYPE: DNA (genomic)
; HYPOTHETICAL: NO
; ANTI-SENSE: NO
; ORIGINAL SOURCE:
; ORGANISM: Enterococcus faecium
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (B) LOCATION 1...813
; SEQUENCE DESCRIPTION: SEQ ID NO: 1566:
US-09-107-532A-1566
Query Match 100.0%; Score 10; DB 4; Length 813;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 252 CGAACGTTTCG 243

RESULT 95
US-08-776-251-10
; Sequence 10, Application US/08776251
; Patent No. 6025340
; GENERAL INFORMATION:
; APPLICANT: Springer, Caroline J
; TITLE OF INVENTION: Surface expression of enzyme in gene directed prodrug therapy
; NUMBER OF SEQUENCES: 27
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Nixon & Vanderhye
; STREET: 1100 No. 6025340th Glebe Road, 8th Floor
; CITY: Arlington
; STATE: Virginia
; COUNTRY: USA
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25 (EPO)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/776,251
; FILING DATE: 31-JAN-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/GB95/01782
; FILING DATE: 27-JUL-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: GB 9415167.7
; FILING DATE: 27-JUL-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Arthur R. Crawford
; REGISTRATION NUMBER: 25,327
; REFERENCE/DOCKET NUMBER: 620-20
; INFORMATION FOR SEQ ID NO: 10:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 816 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: CDNA
; US-08-776-251-10

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; CITY: Arlington
; STATE: Virginia
; COUNTRY: USA
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25 (EPO)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/776,251
; FILING DATE: 31-JAN-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/GB95/01782
; FILING DATE: 27-JUL-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: GB 9415167.7
; FILING DATE: 27-JUL-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Arthur R. Crawford
; REGISTRATION NUMBER: 25,327
; REFERENCE/DOCKET NUMBER: 620-20
; INFORMATION FOR SEQ ID NO: 10:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 816 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: CDNA
; US-08-776-251-10
Query Match 100.0%; Score 10; DB 3; Length 816;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 620 CGAACGTTTCG 629

RESULT 96
US-08-776-251-10/c
; Sequence 10, Application US/08776251
; Patent No. 6025340
; GENERAL INFORMATION:
; APPLICANT: Springer, Caroline J
; TITLE OF INVENTION: Surface expression of enzyme in gene directed prodrug therapy
; NUMBER OF SEQUENCES: 27
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Nixon & Vanderhye
; STREET: 1100 No. 6025340th Glebe Road, 8th Floor
; CITY: Arlington
; STATE: Virginia
; COUNTRY: USA
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25 (EPO)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/776,251
; FILING DATE: 31-JAN-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/GB95/01782
; FILING DATE: 27-JUL-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: GB 9415167.7
; FILING DATE: 27-JUL-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Arthur R. Crawford
; REGISTRATION NUMBER: 25,327
; REFERENCE/DOCKET NUMBER: 620-20
; INFORMATION FOR SEQ ID NO: 10:

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; SEQUENCE CHARACTERISTICS:
; LENGTH: 816 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cdna
US-08-776-251-10

Query Match 100.0%; Score 10; DB 3; Length 816;
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RESULT 97

US-08-998-416-537
; Sequence 537, Application US/08998416
; Patent No. 6239264
; GENERAL INFORMATION:

; APPLICANT: Philippsen, Peter
; APPLICANT: Pohlmann, Rainer
; APPLICANT: Steiner, Sabine
; APPLICANT: Mohr, Christine
; APPLICANT: Wendland, Jürgen
; APPLICANT: Knechtle, Philipp
; APPLICANT: Reibischung, Corinne
; TITLE OF INVENTION: GENOMIC DNA SEQUENCES OF ASHBYA GOSSYPII
; TITLE OF INVENTION: AND USES THEREOF
; NUMBER OF SEQUENCES: 1152
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: No. 6239264artis Corporation
; STREET: 3054 Cornwallis Road
; CITY: Research Triangle Park
; STATE: No. 6239264th Carolina
; COUNTRY: USA
; ZIP: 27709

; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/998,416
; FILING DATE: 24-DEC-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: CH 0016/97
; FILING DATE: 31-DEC-1996

; ATTORNEY/AGENT INFORMATION:
; NAME: Meigs, J. Timothy
; REGISTRATION NUMBER: 38,241
; REFERENCE/DOCKET NUMBER: PF/5-30306/A/CGC1976
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 919-541-8587
; TELEFAX: 919-541-8689
; INFORMATION FOR SEQ ID NO: 537:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 856 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; ORIGINAL SOURCE:
; ORGANISM: PAG1374UP
US-08-998-416-537

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Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

US-08-998-416-537

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RESULT 98

US-08-998-416-537/c
; Sequence 537, Application US/08998416
; Patent No. 6239264
; GENERAL INFORMATION:

; APPLICANT: Philippsen, Peter
; APPLICANT: Pohlmann, Rainer
; APPLICANT: Steiner, Sabine
; APPLICANT: Mohr, Christine
; APPLICANT: Wendland, Jürgen
; APPLICANT: Knechtle, Philipp
; APPLICANT: Reibischung, Corinne
; TITLE OF INVENTION: GENOMIC DNA SEQUENCES OF ASHBYA GOSSYPII
; TITLE OF INVENTION: AND USES THEREOF
; NUMBER OF SEQUENCES: 1152
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: No. 6239264artis Corporation
; STREET: 3054 Cornwallis Road
; CITY: Research Triangle Park
; STATE: No. 6239264th Carolina
; COUNTRY: USA
; ZIP: 27709

; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/998,416
; FILING DATE: 24-DEC-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: CH 0016/97
; FILING DATE: 31-DEC-1996

; ATTORNEY/AGENT INFORMATION:
; NAME: Meigs, J. Timothy
; REGISTRATION NUMBER: 38,241
; REFERENCE/DOCKET NUMBER: PF/5-30306/A/CGC1976
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 919-541-8587
; TELEFAX: 919-541-8689
; INFORMATION FOR SEQ ID NO: 537:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 856 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; ORIGINAL SOURCE:
; ORGANISM: PAG1374UP
US-08-998-416-537

Query Match 100.0%; Score 10; DB 3; Length 856;
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; Patent No. 6703491
; GENERAL INFORMATION:

; APPLICANT: Homburger et al.
; TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster

; FILE REFERENCE: File Reference: 7326-094
; CURRENT APPLICATION NUMBER: US/09/270,767
; CURRENT FILING DATE: 1999-03-17
; NUMBER OF SEQ ID NOS: 62517
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 10741
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; TYPE: DNA
; ORGANISM: Drosophila melanogaster
US-09-270-767-10741

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Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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; Patent No. 6703491
; GENERAL INFORMATION:
; APPLICANT: Homburger et al.
; TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster
; FILE REFERENCE: File Reference: 7326-094
; CURRENT APPLICATION NUMBER: US/09/270,767
; CURRENT FILING DATE: 1999-03-17
; NUMBER OF SEQ ID NOS: 62517
; SOFTWARE: PatentIn Ver. 2.0
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; ORGANISM: Drosophila melanogaster
US-09-270-767-10741

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Search completed: June 30, 2005, 02:08:05
Job time : 71.5 secs

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GenCore version 5.1.6
Copyright (c) 1993 - 2005 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: June 29, 2005, 20:23:08 ; Search time 1720 Seconds
(without alignments)
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Title: US-10-033-243-77

Perfect score: 10

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Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

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Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 100 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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ALIGNMENTS

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LOCUS ABF1--06-A03.g1 ABF3-overexpressing transgenic rice lambda phage
DEFINITION cDNA library (ABF1) Oryza sativa (japonica cultivar-group) cDNA
clone ABF1--06-A03, mRNA sequence.
ACCESSION CF304811
VERSION CF304811.1 GI:33676572
KEYWORDS EST.
SOURCE Oryza sativa (japonica cultivar-group)
ORGANISM Oryza sativa (japonica cultivar-group)
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
Ehrhartoideae; Oryzaceae; Oryza.
REFERENCE 1 (bases 1 to 46)
AUTHORS Kim,J.S., Jun,K.M., Cheong,P.J., Kim,M.J., Lee,T.H., Shin,Y.C.,
Song,S.I., Kim,J.K., Kim,Y.-K. and Nahm,B.H.
Large-scale Sequencing Analysis of Rice ESTs
Unpublished (2003)
CONTACT: Nahm B.H.
Genomics and Genetics Institute, GreenGene Biotech Inc.; Division
of Bioscience and Bioinformatics, Myongji University
Yongin, Gyeonggi, Korea
Tel: 82 31 330 6193
Fax: 82 31 321 6355
Email: bhnahm@bio.com, bhnahm@bio.myongji.ac.kr.
Location/Qualifiers
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XhoI; Leaf was dried for 2hrs. cDNA was inserted into
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with XhoI site. mRNA was prepared from ABA-responsive
element binding transcription factor 3 overexpression
line."
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/organism="Oryza sativa (japonica cultivar-group)"
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/notes="Vector: pBluescript SK(+); Site 1: EcoRI; Site 2:
XhoI; Leaf was dried for 2hrs. cDNA was inserted into
lambda Uni-ZAP XR vector at 5' end with EcoRI and 3' end
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element binding transcription factor 3 overexpression
line."
ORIGIN
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Best Local Similarity 100.0%; Pred. No. 1.1e+04;
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LOCUS ABF1--06-A03.g1 ABF3-overexpressing transgenic rice lambda phage
DEFINITION cDNA library (ABF1) Oryza sativa (japonica cultivar-group) cDNA
clone ABF1--06-A03, mRNA sequence.
ACCESSION CF304811
VERSION CF304811.1 GI:33676572
KEYWORDS EST.
SOURCE Oryza sativa (japonica cultivar-group)

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ORGANISM
Oryza sativa (japonica cultivar-group)
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
Ehrhartoideae; Oryzaceae; Oryza.
REFERENCE 1 (bases 1 to 46)
AUTHORS Kim,J.S., Jun,K.M., Cheong,P.J., Kim,M.J., Lee,T.H., Shin,Y.C.,
Song,S.I., Kim,J.K., Kim,Y.-K. and Nahm,B.H.
Large-scale Sequencing Analysis of Rice ESTs
Unpublished (2003)
CONTACT: Nahm B.H.
Genomics and Genetics Institute, GreenGene Biotech Inc.; Division
of Bioscience and Bioinformatics, Myongji University
Yongin, Gyeonggi, Korea
Tel: 82 31 330 6193
Fax: 82 31 321 6355
Email: bhnahm@bio.com, bhnahm@bio.myongji.ac.kr.
Location/Qualifiers
1. .46
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/mol_type="mRNA"
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phage cDNA library (ABF1)"
/notes="Vector: pBluescript SK(+); Site 1: EcoRI; Site 2:
XhoI; Leaf was dried for 2hrs. cDNA was inserted into
lambda Uni-ZAP XR vector at 5' end with EcoRI and 3' end
with XhoI site. mRNA was prepared from ABA-responsive
element binding transcription factor 3 overexpression
line."
ORIGIN
Query Match 100.0%; Score 10; DB 7; Length 46;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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DEFINITION mRNA sequence.
ACCESSION BI550536
VERSION BI550536.1 GI:15437848
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SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.
REFERENCE 1 (bases 1 to 60)
AUTHORS NIH-MGC http://mgi.nci.nih.gov/.
TITLE National Institutes of Health, Mammalian Gene Collection (MGC)
JOURNAL Unpublished (1999)
COMMENT Contact: Robert Strausberg, Ph.D.
Email: cgapbs-xemail.nih.gov
Tissue Procurement: Miklos Falkovits, M.D., Ph.D.
cDNA Library Preparation: Michael J. Brownstein (NHGRI), Shiraki
Toshiyuki and Piero Carninci (RIKEN)
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLAM11694 row: i column: 16
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FEATURES
source

Location/Qualifiers
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ORIGIN

Query Match 100.0%; Score 10; DB 4; Length 60;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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RESULT 4
BI550536/c

LOCUS 603195461P1 NIH_MGC_95 Homo sapiens cDNA clone IMAGE:5275095 5',
DEFINITION mRNA sequence.
ACCESSION BI550536
VERSION BI550536.1 GI:15437848
KEYWORDS EST.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens

REFERENCE Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
AUTHORS Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.
TITLE 1 (bases 1 to 60)
NTH-MGC http://mgc.nci.nih.gov/
NATIONAL INSTITUTES OF HEALTH, MAMMALIAN GENE COLLECTION (MGC)
JOURNAL Unpublished (1999)
COMMENT Contact: Robert Straubeberg, Ph.D.
Email: cgaops-remail.nih.gov

Tissue Procurement: Miklos Palkovits, M.D., Ph.D.
cDNA Library Preparation: Michael J. Brownstein (NHGRI), Shiraki
Toshiyuki and Piero Carninci (RIKEN)
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLAM1694 row: i column: 16
High quality sequence stop: 60.

FEATURES
source

Location/Qualifiers
1. .60
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:5275095"
/tissue_type="hippocampus"
/lab_host="DH10B"
/clone_lib="NIH_MGC_95"
/note="Organ: brain; Vector: pBluescriptR (modified pBluescript KS+); Site 1: BamHI; Site 2: SalI-XhoI (gtcgag); Oligo-dT primed using primer 5'-TTTTTTTTTTTTTTN-3', size-selected for average insert size 2.5 kb and normalized to ROT 5. This is a primary library enriched for full-length clones and

constructed using the Cap-trapper method (Carninci, in preparation). Library constructed by M. Brownstein (NIMH/NHGRI, National Institutes of Health). Note: this is a NIH_MGC Library."

Query Match 100.0%; Score 10; DB 4; Length 60;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches -10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
|||||
Db 50 CGAACGTTTCG 41

RESULT 5

AA670169
LOCUS 85 bp mRNA linear EST 20-NOV-1997
DEFINITION ab56505.61 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone
IMAGE:845673 3', similar to TR:E196749 E196749 MRNA; EXPRESSED
SEQUENCE TAG ; mRNA sequence.
ACCESSION AA670169
VERSION AA670169.1 GI:2631668
KEYWORDS EST.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens

REFERENCE Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
AUTHORS Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.
TITLE 1 (bases 1 to 85)
Hillier, L., Allen, M., Bowles, L., Dubuque, T., Geisel, G., Jost, S.,
Krizman, D., Kucaba, T., Lacy, M., Le, N., Lennon, G., Marra, M.,
Martins, J., Moore, B., Schellenberg, K., Steptoe, M., Tan, F.,
Theising, B., White, Y., Wylie, T., Waterston, R. and Wilson, R.
WashU-NCI human EST Project
Unpublished (1997)

TITLE
JOURNAL
COMMENT

Contact: Wilson RK
Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
Tel: 314 286 1800
Fax: 314 286 1810
Email: est@watson.wustl.edu

This clone is available royalty-free through LLNL ; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
Trace considered overall poor quality
Possible reversed clone: similarity on wrong strand
Seq primer: -40m13 fwd. ET from Amersham
High quality sequence stop: 1.
Location/Qualifiers
1. .85

FEATURES
source

/organism="Homo sapiens"
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/db_xref="taxon:9606"
/clone="IMAGE:845673"
/tissue_type="lung carcinoma"
/cell_line="NCI-H69"
/dev_stage="cell line NCI-H69"
/lab_host="SOLR (kanamycin resistant)"
/clone_lib="Stratagene lung carcinoma 937218"
/note="Organ: lung; Vector: pBluescript SK-; Site 1:
ECORI; Site 2: XhoI; Cloned unidirectionally. Primer:
Oligo dT. Small cell carcinoma cell line NCI-H69. Average
insert size: 1.0 kb; Uni-ZAP XR Vector; -5' adaptor
sequence: 5' GAATTCGCACGAG 3' -3' adaptor sequence: 5'
CTCAGTGTGTTTTTTTTTTT 3"

ORIGIN

Query Match 100.0%; Score 10; DB 1; Length 85;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
|||||
Db 66 CGAACGTTTCG 75

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RESULT 6
AA670169/c
LOCUS
DEFINITION
  aa65d05.s1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone
  IMAGE:845673 3' similar to TR:E196749 E196749 MRNA; EXPRESSED
SEQUENCE TAG ;, mRNA sequence.
ACCESSION
  AA670169
KEYWORDS
  EST.
SOURCE
  AA670169.1 GI:2631668
  Homo sapiens (human)
ORGANISM
  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
  Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.
REFERENCE
  1 (bases 1 to 85)
  Hillier,L., Allen,M., Bowles,L., Dubuque,T., Geisel,G., Jost,S.,
  Krizman,D., Kucaba,T., Lacy,M., Le,N., Lennon,G., Marra,M.,
  Martin,J., Moore,B., Schellenberg,K., Steptoe,M., Tan,F.,
  Theising,B., White,Y., Wylie,T., Waterston,R. and Wilson,R.
  WashU-NCI human EST Project
  Unpublished (1997)
TITLE
  WashU-NCI human EST Project
JOURNAL
  Unpublished (1997)
COMMENT
  Contact: Wilson RK
  Washington University School of Medicine
  4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
  Tel: 314 286 1800
  Fax: 314 286 1810
  Email: est@watson.wustl.edu
  This clone is available royalty-free through LLNL ; contact the
  IMAGE Consortium (info@image.llnl.gov) for further information.
  Trace considered overall poor quality
  Possible reversed clone: similarity on wrong strand
  Seq primer: -40m13 fwd. ET from Amersham
  High quality sequence stop: 1.
  Location/Qualifiers
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    /mol_type="mRNA"
    /db_xref="taxon:9606"
    /clone="IMAGE:845673"
    /tissue_type="lung carcinoma"
    /cell_line="NCI-H69"
    /dev_stage="cell line NCI-H69"
    /lab_host="SOLR (kanamycin resistant)"
    /clone_lib="Stratagene lung carcinoma 937218"
    /note="Organ: lung; Vector: pBluescript SK-; Site_1:
    EcoRI; Site_2: XhoI; Cloned unidirectionally. Primer:
    Oligo dT. Small cell carcinoma cell line NCI-H69. Average
    insert size: 1.0 kb; Uni-ZAP XR Vector; -5' adaptor
    sequence: 5' GAATTCGCACGAG 3' -3' adaptor sequence: 5'
    CTCGAGTTTTTTTTTTTTTTT 3'"
FEATURES
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    /mol_type="mRNA"
    /db_xref="taxon:9606"
    /clone="IMAGE:845673"
    /tissue_type="lung carcinoma"
    /cell_line="NCI-H69"
    /dev_stage="cell line NCI-H69"
    /lab_host="SOLR (kanamycin resistant)"
    /clone_lib="Stratagene lung carcinoma 937218"
    /note="Organ: lung; Vector: pBluescript SK-; Site_1:
    EcoRI; Site_2: XhoI; Cloned unidirectionally. Primer:
    Oligo dT. Small cell carcinoma cell line NCI-H69. Average
    insert size: 1.0 kb; Uni-ZAP XR Vector; -5' adaptor
    sequence: 5' GAATTCGCACGAG 3' -3' adaptor sequence: 5'
    CTCGAGTTTTTTTTTTTTTTTTTT 3'"
ORIGIN
  Query Match 100.0%; Score 10; DB 1; Length 85;
  Best Local Similarity 100.0%; Pred. No. 1.1e+04;
  Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

  Qy 1 CGAACGTTTCG 10
  |||||
  Db 75 CGAACGTTTCG 66

RESULT 7
AA629864
LOCUS
DEFINITION
  aa48h11.s1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone
  IMAGE:844997 3' similar to TR:E196749 E196749 MRNA; EXPRESSED
SEQUENCE TAG ;, mRNA sequence.
ACCESSION
  AA629864
KEYWORDS
  EST.
SOURCE
  AA629864.1 GI:2552475
  Homo sapiens (human)
ORGANISM
  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
  Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.
REFERENCE
  1 (bases 1 to 85)
  Hillier,L., Allen,M., Bowles,L., Dubuque,T., Geisel,G., Jost,S.,
  Krizman,D., Kucaba,T., Lacy,M., Le,N., Lennon,G., Marra,M.,
  Martin,J., Moore,B., Schellenberg,K., Steptoe,M., Tan,F.,
  Theising,B., White,Y., Wylie,T., Waterston,R. and Wilson,R.
  WashU-NCI human EST Project
  Unpublished (1997)
TITLE
  WashU-NCI human EST Project
JOURNAL
  Unpublished (1997)
COMMENT
  Contact: Wilson RK
  Washington University School of Medicine
  4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
  Tel: 314 286 1800
  Fax: 314 286 1810
  Email: est@watson.wustl.edu
  This clone is available royalty-free through LLNL ; contact the
  IMAGE Consortium (info@image.llnl.gov) for further information.
  Trace considered overall poor quality
  Possible reversed clone: similarity on wrong strand
  Seq primer: -40m13 fwd. ET from Amersham
  High quality sequence stop: 1.
  Location/Qualifiers
    1..85
    /organism="Homo sapiens"
    /mol_type="mRNA"
    /db_xref="taxon:9606"
    /clone="IMAGE:845673"
    /tissue_type="lung carcinoma"
    /cell_line="NCI-H69"
    /dev_stage="cell line NCI-H69"
    /lab_host="SOLR (kanamycin resistant)"
    /clone_lib="Stratagene lung carcinoma 937218"
    /note="Organ: lung; Vector: pBluescript SK-; Site_1:
    EcoRI; Site_2: XhoI; Cloned unidirectionally. Primer:
    Oligo dT. Small cell carcinoma cell line NCI-H69. Average
    insert size: 1.0 kb; Uni-ZAP XR Vector; -5' adaptor
    sequence: 5' GAATTCGCACGAG 3' -3' adaptor sequence: 5'
    CTCGAGTTTTTTTTTTTTTTTTTT 3'"
ORIGIN
  Query Match 100.0%; Score 10; DB 1; Length 85;
  Best Local Similarity 100.0%; Pred. No. 1.1e+04;
  Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

  Qy 1 CGAACGTTTCG 10
  |||||
  Db 75 CGAACGTTTCG 66

RESULT 8
AA629864/c
LOCUS
DEFINITION
  aa48h11.s1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone
  IMAGE:844997 3' similar to TR:E196749 E196749 MRNA; EXPRESSED
SEQUENCE TAG ;, mRNA sequence.
ACCESSION
  AA629864
KEYWORDS
  EST.
SOURCE
  AA629864.1 GI:2552475
  Homo sapiens (human)
ORGANISM
  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
  Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.
REFERENCE
  1 (bases 1 to 85)
  Hillier,L., Allen,M., Bowles,L., Dubuque,T., Geisel,G., Jost,S.,
  Krizman,D., Kucaba,T., Lacy,M., Le,N., Lennon,G., Marra,M.,
  Martin,J., Moore,B., Schellenberg,K., Steptoe,M., Tan,F.,
  Theising,B., White,Y., Wylie,T., Waterston,R. and Wilson,R.
  WashU-NCI human EST Project
  Unpublished (1997)
TITLE
  WashU-NCI human EST Project
JOURNAL
  Unpublished (1997)
COMMENT
  Contact: Wilson RK
  Washington University School of Medicine
  4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
  Tel: 314 286 1800
  Fax: 314 286 1810
  Email: est@watson.wustl.edu
  This clone is available royalty-free through LLNL ; contact the
  IMAGE Consortium (info@image.llnl.gov) for further information.
  Trace considered overall poor quality
  Possible reversed clone: similarity on wrong strand
  Seq primer: -40m13 fwd. ET from Amersham
  High quality sequence stop: 1.
  Location/Qualifiers
    1..85
    /organism="Homo sapiens"
    /mol_type="mRNA"
    /db_xref="taxon:9606"
    /clone="IMAGE:844997"
    /tissue_type="lung carcinoma"
    /cell_line="NCI-H69"
    /dev_stage="cell line NCI-H69"
    /lab_host="SOLR (kanamycin resistant)"
    /clone_lib="Stratagene lung carcinoma 937218"
    /note="Organ: lung; Vector: pBluescript SK-; Site_1:
    EcoRI; Site_2: XhoI; Cloned unidirectionally. Primer:
    Oligo dT. Small cell carcinoma cell line NCI-H69. Average
    insert size: 1.0 kb; Uni-ZAP XR Vector; -5' adaptor
    sequence: 5' GAATTCGCACGAG 3' -3' adaptor sequence: 5'
    CTCGAGTTTTTTTTTTTTTTTTTT 3'"
ORIGIN
  Query Match 100.0%; Score 10; DB 1; Length 85;
  Best Local Similarity 100.0%; Pred. No. 1.1e+04;
  Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

  Qy 1 CGAACGTTTCG 10
  |||||
  Db 66 CGAACGTTTCG 75

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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.
REFERENCE
  1 (bases 1 to 85)
  Hillier,L., Allen,M., Bowles,L., Dubuque,T., Geisel,G., Jost,S.,
  Krizman,D., Kucaba,T., Lacy,M., Le,N., Lennon,G., Marra,M.,
  Martin,J., Moore,B., Schellenberg,K., Steptoe,M., Tan,F.,
  Theising,B., White,Y., Wylie,T., Waterston,R. and Wilson,R.
  WashU-NCI human EST Project
  Unpublished (1997)
TITLE
  WashU-NCI human EST Project
JOURNAL
  Unpublished (1997)
COMMENT
  Contact: Wilson RK
  Washington University School of Medicine
  4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
  Tel: 314 286 1800
  Fax: 314 286 1810
  Email: est@watson.wustl.edu
  This clone is available royalty-free through LLNL ; contact the
  IMAGE Consortium (info@image.llnl.gov) for further information.
  Trace considered overall poor quality
  Possible reversed clone: similarity on wrong strand
  Seq primer: -40m13 fwd. ET from Amersham
  High quality sequence stop: 1.
  Location/Qualifiers
    1..85
    /organism="Homo sapiens"
    /mol_type="mRNA"
    /db_xref="taxon:9606"
    /clone="IMAGE:844997"
    /tissue_type="lung carcinoma"
    /cell_line="NCI-H69"
    /dev_stage="cell line NCI-H69"
    /lab_host="SOLR (kanamycin resistant)"
    /clone_lib="Stratagene lung carcinoma 937218"
    /note="Organ: lung; Vector: pBluescript SK-; Site_1:
    EcoRI; Site_2: XhoI; Cloned unidirectionally. Primer:
    Oligo dT. Small cell carcinoma cell line NCI-H69. Average
    insert size: 1.0 kb; Uni-ZAP XR Vector; -5' adaptor
    sequence: 5' GAATTCGCACGAG 3' -3' adaptor sequence: 5'
    CTCGAGTTTTTTTTTTTTTTTTTT 3'"
ORIGIN
  Query Match 100.0%; Score 10; DB 1; Length 85;
  Best Local Similarity 100.0%; Pred. No. 1.1e+04;
  Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

  Qy 1 CGAACGTTTCG 10
  |||||
  Db 66 CGAACGTTTCG 75

RESULT 8
AA629864/c
LOCUS
DEFINITION
  aa48h11.s1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone
  IMAGE:844997 3' similar to TR:E196749 E196749 MRNA; EXPRESSED
SEQUENCE TAG ;, mRNA sequence.
ACCESSION
  AA629864
KEYWORDS
  EST.
SOURCE
  AA629864.1 GI:2552475
  Homo sapiens (human)
ORGANISM
  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
  Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.
REFERENCE
  1 (bases 1 to 85)
  Hillier,L., Allen,M., Bowles,L., Dubuque,T., Geisel,G., Jost,S.,
  Krizman,D., Kucaba,T., Lacy,M., Le,N., Lennon,G., Marra,M.,
  Martin,J., Moore,B., Schellenberg,K., Steptoe,M., Tan,F.,
  Theising,B., White,Y., Wylie,T., Waterston,R. and Wilson,R.
  WashU-NCI human EST Project
  Unpublished (1997)
TITLE
  WashU-NCI human EST Project
JOURNAL
  Unpublished (1997)
COMMENT
  Contact: Wilson RK
  Washington University School of Medicine
  4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
  Tel: 314 286 1800
  Fax: 314 286 1810
  Email: est@watson.wustl.edu
  This clone is available royalty-free through LLNL ; contact the
  IMAGE Consortium (info@image.llnl.gov) for further information.
  Trace considered overall poor quality
  Possible reversed clone: similarity on wrong strand
  Seq primer: -40m13 fwd. ET from Amersham
  High quality sequence stop: 1.
  Location/Qualifiers
    1..85
    /organism="Homo sapiens"
    /mol_type="mRNA"
    /db_xref="taxon:9606"
    /clone="IMAGE:844997"
    /tissue_type="lung carcinoma"
    /cell_line="NCI-H69"
    /dev_stage="cell line NCI-H69"
    /lab_host="SOLR (kanamycin resistant)"
    /clone_lib="Stratagene lung carcinoma 937218"
    /note="Organ: lung; Vector: pBluescript SK-; Site_1:
    EcoRI; Site_2: XhoI; Cloned unidirectionally. Primer:
    Oligo dT. Small cell carcinoma cell line NCI-H69. Average
    insert size: 1.0 kb; Uni-ZAP XR Vector; -5' adaptor
    sequence: 5' GAATTCGCACGAG 3' -3' adaptor sequence: 5'
    CTCGAGTTTTTTTTTTTTTTTTTT 3'"
ORIGIN
  Query Match 100.0%; Score 10; DB 1; Length 85;
  Best Local Similarity 100.0%; Pred. No. 1.1e+04;
  Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

  Qy 1 CGAACGTTTCG 10
  |||||
  Db 66 CGAACGTTTCG 75

```

Tel: 314 286 1800
Fax: 314 286 1810

Email: est@watson.wustl.edu

This clone is available royalty-free through LLNL; contact the IMAGE Consortium (info@image.llnl.gov) for further information.

Trace considered overall poor quality

Possible reversed clone: similarity on wrong strand

Insert length: 899 Std Error: 0.00

Seq primer: -40ml3 fwd. ET from Amersham

High quality sequence stop: 1.

Location/Qualifiers

1..85

/organism="Homo sapiens"

/mol_type="mRNA"

/db_xref="taxon:9606"

/clone="IMAGE:884997"

/tissue_type="lung carcinoma"

/cell_line="NCI-H69"

/dev_stage="cell line NCI-H69"

/lab_host="SOLR (kanamycin resistant)"

/clone_lib="Stratagene lung carcinoma 937218"

/note="Organ: lung; Vector: pBluescript SK-; Site 1:

EcoRI; Site 2: XhoI; Cloned unidirectionally, primer:

Oligo dt. Small cell carcinoma cell line NCI-H69. Average

insert size: 1.0 kb; Uni-ZAP XR Vector; -5' adaptor

sequence: 5' GAATTCGCGACGAG 3' -3' adaptor sequence: 5'

CTCGAGTTTTTTTTTTTTTTT 3'

ORIGIN

Query Match 100.0%; Score 10; DB 1; Length 85;

Best Local Similarity 100.0%; Pred. No. 1.1e+04;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

|||||

Db 75 CGAACGTTTCG 66

RESULT 9

BE576515

LOCUS

DEFINITION BE576515 94 bp mRNA linear EST 15-AUG-2000

5', mRNA sequence. IMAGE:3399604

ACCESSION BE576515

VERSION BE576515.1 GI:9826314

KEYWORDS EST.

SOURCE Xenopus laevis (African clawed frog)

ORGANISM

Xenopus laevis

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Amphibia; Batrachia; Anura; Mesobatrachia; Pipidoidea; Pipidae;

Xenopodinae; Xenopus; Xenopus.

1 (bases 1 to 94)

NCI-CCAP http://www.ncbi.nlm.nih.gov/ncicgap.

National Cancer Institute, Cancer Genome Anatomy Project (CGAP),

Tumor Gene Index

Unpublished (1997)

Other ESTs: dc40g03.x1

Contact: Robert Strausberg, Ph.D.

Tissue Procurement: Martha Rabbert, Steven L. Klein, Ph.D.

cDNA Library Preparation: Life Technologies, Inc.

cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Washington University Genome Sequencing Center

Clone distribution: Xenopus clones from this library are available

through the I.M.A.G.E. Consortium/LLNL at: info@image.llnl.gov

Seq primer: -40RP from Gibco

High quality sequence stop: 83.

Location/Qualifiers

1..94

/organism="Xenopus laevis"

/mol_type="mRNA"

/db_xref="taxon:8355"

/clone="IMAGE:3399604"

/tissue_type="embryo (stages 24-25)"

/lab_host="DH10B (phage-resistant)"

/clone_lib="NICHD XGC Emb3"

/notes="Vector: pCMV-SPORT6; Site 1: NotI; Site 2: SalI;

Cloned unidirectionally, primer: Oligo dt. Average insert

size 1.7 kb. Constructed by Life Technologies. Note: This

is a Xenopus Gene Collection (XGC) library."

ORIGIN

Query Match 100.0%; Score 10; DB 2; Length 94;

Best Local Similarity 100.0%; Pred. No. 1.1e+04;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

|||||

Db 70 CGAACGTTTCG 79

RESULT 10

BE576515/c

LOCUS

DEFINITION BE576515 94 bp mRNA linear EST 15-AUG-2000

5', mRNA sequence. IMAGE:3399604

ACCESSION BE576515

VERSION BE576515.1 GI:9826314

KEYWORDS EST.

SOURCE Xenopus laevis (African clawed frog)

Xenopus laevis

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Amphibia; Batrachia; Anura; Mesobatrachia; Pipidoidea; Pipidae;

Xenopodinae; Xenopus; Xenopus.

1 (bases 1 to 94)

NCI-CCAP http://www.ncbi.nlm.nih.gov/ncicgap.

National Cancer Institute, Cancer Genome Anatomy Project (CGAP),

Tumor Gene Index

Unpublished (1997)

Other ESTs: dc40g03.x1

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-remail.nih.gov

Tissue Procurement: Martha Rabbert, Steven L. Klein, Ph.D.

cDNA Library Preparation: Life Technologies, Inc.

DNA Sequencing by: The I.M.A.G.E. Consortium (LLNL)

Clone distribution: Xenopus clones from this library are available

through the I.M.A.G.E. Consortium/LLNL at: info@image.llnl.gov

Seq primer: -40RP from Gibco

High quality sequence stop: 83.

Location/Qualifiers

1..94

/organism="Xenopus laevis"

/mol_type="mRNA"

/db_xref="taxon:8355"

/clone="IMAGE:3399604"

/lab_host="DH10B (phage-resistant)"

/clone_lib="NICHD XGC Emb3"

/notes="Vector: pCMV-SPORT6; Site 1: NotI; Site 2: SalI;

Cloned unidirectionally, primer: Oligo dt. Average insert

size 1.7 kb. Constructed by Life Technologies. Note: This

is a Xenopus Gene Collection (XGC) library."

ORIGIN

Query Match 100.0%; Score 10; DB 2; Length 94;

Best Local Similarity 100.0%; Pred. No. 1.1e+04;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

|||||

Db 79 CGAACGTTTCG 70

RESULT 11

CV019946

LOCUS
 DEFINITION tbt_009611 Normalized Nicotiana tabacum cDNA library EST 19-AUG-2004
 tabacum cDNA clone tbt_009611 5', mRNA sequence.

ACCESSION
 VERSION CV019946
 KEYWORDS
 SOURCE CV019946.1 GI:51461454
 EST.

ORGANISM
 Nicotiana tabacum (common tobacco)

REFERENCE
 AUTHORS Li, W.Z., Shao, Y., Jin, Q.C., Wang, S., Dai, C.E., Zeng, Z.L., Wang, Y.Q., Deng, Y., Jin, Q.C., Wang, S., Dai, C.E., Zeng, Z.L., Wang, Y.Q., Dong, H.T. and Li, D.B.
 TITLE Large-scale identification of ESTs from Nicotiana tabacum by normalized cDNA library sequencing
 JOURNAL Unpublished (2004)
 COMMENT Contact: Wenzheng Li, Yan Shao, Yongping Li, Xiuping Lu, Limin Song, Haitao Dong, Debao Li
 The Tobacco Science Research Institute of Yunnan Province; Yunnan Provincial Tobacco Group Dali Branch; Bioinformatics and Gene Network Research Group, Zhejiang University
 The Tobacco Science Research Institute of Yunnan Province, Yuxi 653100, China
 Email: webmaster@estarray.org, URL: http://www.estarray.org
 Only the high quality region of sequence was submitted.
 Seq primer: M13.

FEATURES
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 Location/Qualifiers
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 /organism="Nicotiana tabacum"
 /mol_type="mRNA"
 /db_xref="taxon:4097"
 /clone="tbt_009611"
 /tissue_type="Mixed"
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 /note="Vector: pBS-SK+"

ORIGIN
 Query Match 100.0%; Score 10; DB 7; Length 103;
 Best Local Similarity 100.0%; Pred. No. 1.1e+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 |||||
 Db 79 CGAACGTTTCG 88

RESULT 12
 LOCUS
 DEFINITION CV019946 103 bp mRNA linear EST 19-AUG-2004
 tabacum cDNA clone tbt_009611 5', mRNA sequence.

ACCESSION
 VERSION CV019946
 KEYWORDS
 SOURCE CV019946.1 GI:51461454
 EST.

ORGANISM
 Nicotiana tabacum (common tobacco)

REFERENCE
 AUTHORS Li, W.Z., Shao, Y., Jin, Q.C., Wang, S., Dai, C.E., Zeng, Z.L., Wang, Y.Q., Deng, Y., Jin, Q.C., Wang, S., Dai, C.E., Zeng, Z.L., Wang, Y.Q., Dong, H.T. and Li, D.B.
 TITLE Large-scale identification of ESTs from Nicotiana tabacum by normalized cDNA library sequencing
 JOURNAL Unpublished (2004)
 COMMENT Contact: Wenzheng Li, Yan Shao, Yongping Li, Xiuping Lu, Limin Song, Haitao Dong, Debao Li
 The Tobacco Science Research Institute of Yunnan Province; Yunnan Provincial Tobacco Group Dali Branch; Bioinformatics and Gene Network Research Group, Zhejiang University

The Tobacco Science Research Institute of Yunnan Province, Yuxi 653100, China
 Email: webmaster@estarray.org, URL: http://www.estarray.org
 Only the high quality region of sequence was submitted.
 Seq primer: M13.

FEATURES
 source
 Location/Qualifiers
 1..103
 /organism="Nicotiana tabacum"
 /mol_type="mRNA"
 /db_xref="taxon:4097"
 /clone="tbt_009611"
 /tissue_type="Mixed"
 /clone_lib="Normalized Nicotiana tabacum cDNA library"
 /note="Vector: pBS-SK+"

ORIGIN
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 Best Local Similarity 100.0%; Pred. No. 1.1e+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
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 Db 88 CGAACGTTTCG 79

RESULT 13
 LOCUS
 DEFINITION CNS09N54 108 bp mRNA linear HTC 08-JAN-2003
 Single read from an extremity of a full-length cDNA clone made from Anopheles gambiae total adult females. 5-PRIME end of clone FK0AAC5AH09 of strain 6-9 of Anopheles gambiae (African malaria mosquito).
 EX066068
 EX066068.1 GI:27639349
 HTc.
 Anopheles gambiae (African malaria mosquito)
 Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota; Neoptera; Endopterygota; Diptera; Nematocera; Culicoidea;

ACCESSION
 VERSION EX066068
 KEYWORDS
 SOURCE
 ORGANISM

REFERENCE
 AUTHORS
 TITLE
 JOURNAL

FEATURES
 source
 Location/Qualifiers
 1..108
 /organism="Anopheles gambiae"
 /mol_type="mRNA"
 /strain="6-9"
 /db_xref="taxon:7165"
 /clone="FK0AAC5AH09"
 /plasmid="pMB18S-FL"
 /note="end : 5-PRIME"

ORIGIN
 Query Match 100.0%; Score 10; DB 3; Length 108;
 Best Local Similarity 100.0%; Pred. No. 1.1e+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 |||||
 Db 52 CGAACGTTTCG 61

RESULT 14
 LOCUS
 DEFINITION CNS09N54/c 108 bp mRNA linear HTC 08-JAN-2003
 Single read from an extremity of a full-length cDNA clone made from Anopheles gambiae total adult females. 5-PRIME end of clone FK0AAC5AH09 of strain 6-9 of Anopheles gambiae (African malaria mosquito).

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ACCESSION      BX066068
VERSION         BX066068.1  GI:27639349
KEYWORDS        HTC.
SOURCE          Anopheles gambiae (African malaria mosquito)
ORGANISM        Anopheles gambiae
                Eukaryota; Metazoa; Arthropoda; Insecta; Pterygota;
                Neoptera; Endopterygota; Diptera; Nematocera; Culicoides;
                Anopheles.
REFERENCE       1 (bases 1 to 108)
AUTHORS         Direct Submission
TITLE           Submitted (06-JAN-2003) Genoscope - Centre National de Sequencage :
JOURNAL         BP 191 91006 EVRY cedex - FRANCE (E-mail : seqref@genoscope.cns.fr
                - Web : www.genoscope.cns.fr)
FEATURES       source
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                /strain="6-9"
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                /plasmid="pME18S-FL"
                /note="end : 5-PRIME"

ORIGIN
Query Match      100.0%; Score 10; DB 3; Length 108;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
    |||||
Db 61 CGAACGTTTCG 52

RESULT 15
BG009324
LOCUS           BG009324             109 bp  mRNA  linear  EST 24-JAN-2001
DEFINITION     RC1-GN0198-011200-023-g01 GN0198 Homo sapiens cDNA, mRNA sequence.
ACCESSION      BG009324
VERSION        BG009324.1  GI:12455231
KEYWORDS       EST.
SOURCE         Homo sapiens (human)
ORGANISM       Homo sapiens
                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
AUTHORS        Nagai,M.A., da Silva,W. Jr., Zago,M.A., Bordin,S., Costa,F.F.,
                Goldman,G.H., Carvalho,A.F., Matsukuma,A., Baia,G.S., Simpson,D.H.,
                Brunstein,A., deOliveira,P.S., Bucher,P., Jongeneel,C.V.,
                O'Hare,M.J., Soares,F., Brentani,R.R., Reis,L.F., de Souza,S.J. and
                Simpson,A.J.
TITLE          Shotgun sequencing of the human transcriptome with ORF expressed
                sequence tags
JOURNAL        Proc. Natl. Acad. Sci. U.S.A. 97 (7), 3491-3496 (2000)
MEDLINE       20202663
PUBMED        10737800
COMMENT        Contact: Simpson A.J.G.
                Laboratory of Cancer Genetics
                Ludwig Institute for Cancer Research
                Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
                Brazil
                Tel: +55-11-2704922
                Fax: +55-11-2707001
                Email: asimpson@ludwig.org.br
                This sequence was derived from the FAPESP/LICR Human Cancer Genome
                Project. This entry can be seen in the following URL
                (http://www.ludwig.org.br/scripts/gethtml2.pl?tl=RC1&t2=RC1-GN0198-
                011200-023-g01&t3=2000-12-01&t4=1)
                Seq primer: puc 18 forward
                High quality sequence start: 15
                High quality sequence stop: 76.
                Location/Qualifiers

FEATURES
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1..109
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/dev_stage="Adult"
/clone_lib="GN0198"
/note="Organ: Placenta normal; Vector: puc18; Site_1:
Smai; Site_2: Smai; A mini-library was made by cloning
products derived from ORESTES PCR (U.S. Letters Patent
application No. 196,716 - Ludwig Institute for Cancer
Research) profiles into the pUC 18 vector. Reverse
transcription of tissue mRNA and cDNA amplification were
performed under low stringency conditions."

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1..109
/organism="Homo sapiens"
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/dev_stage="Adult"
/clone_lib="GN0198"
/note="Organ: Placenta normal; Vector: puc18; Site_1:
Smai; Site_2: Smai; A mini-library was made by cloning
products derived from ORESTES PCR (U.S. Letters Patent
application No. 196,716 - Ludwig Institute for Cancer
Research) profiles into the pUC 18 vector. Reverse
transcription of tissue mRNA and cDNA amplification were
performed under low stringency conditions."

ORIGIN
Query Match      100.0%; Score 10; DB 4; Length 109;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
    |||||
Db 35 CGAACGTTTCG 44

RESULT 16
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LOCUS           BG009324             109 bp  mRNA  linear  EST 24-JAN-2001
DEFINITION     RC1-GN0198-011200-023-g01 GN0198 Homo sapiens cDNA, mRNA sequence.
ACCESSION      BG009324
VERSION        BG009324.1  GI:12455231
KEYWORDS       EST.
SOURCE         Homo sapiens (human)
ORGANISM       Homo sapiens
                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
AUTHORS        Dias Neto,E., Garcia Correa,R., Verjovski-Almeida,S., Briones,M.R.,
                Nagai,M.A., da Silva,W. Jr., Zago,M.A., Bordin,S., Costa,F.F.,
                Goldman,G.H., Carvalho,A.F., Matsukuma,A., Baia,G.S., Simpson,D.H.,
                Brunstein,A., deOliveira,P.S., Bucher,P., Jongeneel,C.V.,
                O'Hare,M.J., Soares,F., Brentani,R.R., Reis,L.F., de Souza,S.J. and
                Simpson,A.J.
TITLE          Shotgun sequencing of the human transcriptome with ORF expressed
                sequence tags
JOURNAL        Proc. Natl. Acad. Sci. U.S.A. 97 (7), 3491-3496 (2000)
MEDLINE       20202663
PUBMED        10737800
COMMENT        Contact: Simpson A.J.G.
                Laboratory of Cancer Genetics
                Ludwig Institute for Cancer Research
                Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
                Brazil
                Tel: +55-11-2704922
                Fax: +55-11-2707001
                Email: asimpson@ludwig.org.br
                This sequence was derived from the FAPESP/LICR Human Cancer Genome
                Project. This entry can be seen in the following URL
                (http://www.ludwig.org.br/scripts/gethtml2.pl?tl=RC1&t2=RC1-GN0198-
                011200-023-g01&t3=2000-12-01&t4=1)
                Seq primer: puc 18 forward
                High quality sequence start: 15
                High quality sequence stop: 76.
                Location/Qualifiers

FEATURES
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/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/dev_stage="Adult"
/clone_lib="GN0198"
/note="Organ: Placenta normal; Vector: puc18; Site_1:
Smai; Site_2: Smai; A mini-library was made by cloning
products derived from ORESTES PCR (U.S. Letters Patent
application No. 196,716 - Ludwig Institute for Cancer

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Research) profiles into the pUC 18 vector. Reverse transcription of tissue mRNA and cDNA amplification were performed under low stringency conditions."

ORIGIN

Query Match 100.0%; Score 10; DB 4; Length 109;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 44 CGAACGTTTCG 35

RESULT 17
FR0035679
LOCUS
DEFINITION
Fugu rubripes GSS sequence, clone 019B02d36, genomic survey

ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
Takifugu rubripes (Fugu rubripes)
Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Tetraodontiformes;
Tetraodontoidea; Tetraodontidae; Takifugu.

REFERENCE
AUTHORS
Elgar, G., Clark, M.S., Meek, S., Smith, S., Warner, S., Edwards, Y.J.,
Bouchireb, N., Cottage, A., Yeo, G.S., Umrانيا, Y., Williams, G. and
Brenner, S.

TITLE
Generation and analysis of 25 Mb of genomic DNA from the pufferfish
Fugu rubripes by sequence scanning

JOURNAL
MEDLINE
PUBMED
REFERENCE
AUTHORS
Elgar, G., Clark, M.S., Meek, S., Smith, S., Warner, S., Edwards, Y.J.,
Umrانيا, Y., Williams, G. and Brenner, S.

TITLE
JOURNAL
Submitted (11-OCT-1999) MRC Human Genome Mapping Project Resource
Centre, Hinxton, Cambridge, CB10 1SB. UK Email:

COMMENT
Vector: pBluescript II KS
V-type: phagemid
PRIMER: KS
DESCR:
One pass dye-terminator sequencing of cosmid cloned genomic
sequence.

FEATURES
source
Location/Qualifiers

1. .111
/organism="Takifugu rubripes"
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/clone="019B02d36"
/clone_lib="cosmid 019B02"

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Query Match 100.0%; Score 10; DB 9; Length 111;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 24 CGAACGTTTCG 33

RESULT 18
FR0035679/c
LOCUS
DEFINITION
Fugu rubripes GSS sequence, clone 019B02d36, genomic survey
sequence.

ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
Takifugu rubripes (Fugu rubripes)

Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Tetraodontiformes;
Tetraodontoidea; Tetraodontidae; Takifugu.

REFERENCE
AUTHORS
Elgar, G., Clark, M.S., Meek, S., Smith, S., Warner, S., Edwards, Y.J.,
Bouchireb, N., Cottage, A., Yeo, G.S., Umrانيا, Y., Williams, G. and
Brenner, S.

TITLE
Generation and analysis of 25 Mb of genomic DNA from the pufferfish
Fugu rubripes by sequence scanning

JOURNAL
MEDLINE
PUBMED
REFERENCE
AUTHORS
Elgar, G., Clark, M.S., Smith, S., Meek, S., Warner, S., Edwards, Y.J.,
Umrانيا, Y., Williams, G. and Brenner, S.

TITLE
JOURNAL
Submitted (11-OCT-1999) MRC Human Genome Mapping Project Resource
Centre, Hinxton, Cambridge, CB10 1SB. UK Email:

COMMENT
Vector: pBluescript II KS
V-type: phagemid
PRIMER: KS
DESCR:
One pass dye-terminator sequencing of cosmid cloned genomic
sequence.

FEATURES
source
Location/Qualifiers

1. .111
/organism="Takifugu rubripes"
/mol_type="genomic DNA"
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/clone="019B02d36"
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Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 33 CGAACGTTTCG 24

RESULT 19
CD922571
LOCUS

DEFINITION
G750.103M12F010528 G750 Triticum aestivum cDNA clone G750103M12,
mRNA sequence.

ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
CD922571
CD922571.1 GI:32770335
EST.
Triticum aestivum (bread wheat)

Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
Pooidae; Triticeae; Triticum.

REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
Genoplaute, a major partnership french program in plant genomics
Unpublished (2003)
Contact: Genoplaute
Genoplaute

93, rue Henri Rochefort 91025 EVRY CEDEX France
Tel: 33 1 69 47 54 00
Fax: 33 1 69 47 54 10
This sequence has been generated in the framework of the french
plant genomics programme 'Genoplaute' (<http://www.genoplaute.com>)

and <http://genoplatte-info.infobiogen.fr>).

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      /clone_lib="G750"

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  Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 63 CGAACGTTTCG 72

RESULT 20
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LOCUS CD922571 116 bp mRNA linear EST 15-JUL-2003
DEFINITION G750.103M12F010528 G750 Triticum aestivum cDNA clone G750103M12,
mRNA sequence.
ACCESSION CD922571
VERSION CD922571.1 GI:32770335
KEYWORDS EST.
SOURCE Triticum aestivum (bread wheat)
  ORGANISM
    Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
    Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
    Pooideae; Triticeae; Triticum.
  1 (bases 1 to 116)
  Genoplatte.
  Genoplatte, a major partnership french program in plant genomics
  Unpublished (2003)
  Contact: Genoplatte
  Genoplatte
  93, rue Henri Rochefort 91025 EVRY CEDEX France
  Tel: 33 1 69 47 54 00
  Fax: 33 1 69 47 54 10
  This sequence has been generated in the framework of the french
  plant genomics programme 'Genoplatte' (http://www.genoplatte.com)
  and http://genoplatte-info.infobiogen.fr).

FEATURES
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    /tissue_type="grain (750 degrees per day after
    pollination)"
    /clone_lib="G750"

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  Best Local Similarity 100.0%; Pred. No. 1.1e+04;
  Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 72 CGAACGTTTCG 63

RESULT 21
TA323B09Q
LOCUS TA323B09Q 116 bp DNA linear GSS 13-DEC-2000
DEFINITION T. brucei sheared genomic DNA clone 323b09, reverse sequence,
genomic survey sequence.

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```

ACCESSION AL491306
VERSION AL491306.1 GI:11866954
KEYWORDS GSS.
SOURCE Trypanosoma brucei
  ORGANISM
    Eukaryota; Euglenozoa; Kinetoplastida; Trypanosomatidae;
    Trypanosoma.
  1 (bases 1 to 116)
  Hall, N., Bowman, S., Lennard, N.J., Doggett, J., Atkin, R.,
  Chillingworth, C., Ormond, D., Harris, B., El-Sayed, N., Hou, L.,
  Melville, S.E., Rajandream, M.A. and Barrell, B.G.
  Direct Submission
  Submitted (10-DEC-2000) Trypanosoma brucei genome sequencing
  project, Sanger Centre, The Wellcome Trust Genome Campus, Hinxton,
  Cambridge CB10 1SA, E-mail: barrell@sanger.ac.uk and
  nh@sanger.ac.uk
  Constructed at the Institute for Genomic Research (TIGR),
  Rockville, MD. Genomic DNA isolated from a cloned population of
  Trypanosoma brucei (TREU927/4 Gutat 10.1) was mechanically sheared
  to give a tight size distribution (
  4 kb). The v + i method used for the library construction is
  described in detail in Smith, H. and Venter, J.C. (Making small
  insert libraries for whole genome shotgun sequencing projects. In
  Genome Sequencing: A Practical Approach, eds. M. Vaudin and B.
  Barrell, Oxford University Press, 1999).
  Email: nelsayed@tigr.org
  Details of T. brucei sequencing at the Sanger Centre are available
  at http://www.sanger.ac.uk/Projects/T\_brucei/.
  Location/Qualifiers
    1..116
    /organism="Trypanosoma brucei"
    /mol_type="genomic DNA"
    /strain="TREU927"
    /db_xref="taxon:5691"
    /clone="323b09"

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  Best Local Similarity 100.0%; Pred. No. 1.1e+04;
  Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 67 CGAACGTTTCG 76

RESULT 22
TA323B09Q/c
LOCUS TA323B09Q 116 bp DNA linear GSS 13-DEC-2000
DEFINITION T. brucei sheared genomic DNA clone 323b09, reverse sequence,
genomic survey sequence.
ACCESSION AL491306
VERSION AL491306.1 GI:11866954
KEYWORDS GSS.
SOURCE Trypanosoma brucei
  ORGANISM
    Eukaryota; Euglenozoa; Kinetoplastida; Trypanosomatidae;
    Trypanosoma.
  1 (bases 1 to 116)
  Hall, N., Bowman, S., Lennard, N.J., Doggett, J., Atkin, R.,
  Chillingworth, C., Ormond, D., Harris, B., El-Sayed, N., Hou, L.,
  Melville, S.E., Rajandream, M.A. and Barrell, B.G.
  Direct Submission
  Submitted (10-DEC-2000) Trypanosoma brucei genome sequencing
  project, Sanger Centre, The Wellcome Trust Genome Campus, Hinxton,
  Cambridge CB10 1SA, E-mail: barrell@sanger.ac.uk and
  nh@sanger.ac.uk
  Constructed at the Institute for Genomic Research (TIGR),
  Rockville, MD. Genomic DNA isolated from a cloned population of
  Trypanosoma brucei (TREU927/4 Gutat 10.1) was mechanically sheared
  to give a tight size distribution (
  4 kb). The v + i method used for the library construction is
  described in detail in Smith, H. and Venter, J.C. (Making small

```

insert libraries for whole genome shotgun sequencing projects. In
Genome Sequencing: A Practical Approach, eds. M. Vaudin and B.
Barrell, Oxford University Press, 1999).
Email: nelsayed@r.riken.jp
Details of T. brucei sequencing at the Sanger Centre are available
at http://www.sanger.ac.uk/Projects/T_brucei/.

FEATURES

source 1..116
/organism="Trypanosoma brucei"
/mol_type="genomic DNA"
/strain="TREU927"
/db_xref="taxon:5691"
/clone="323b09"

ORIGIN

Query Match 100.0%; Score 10; DB 9; Length 116;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

Db 76 CGAACGTTTCG 67

RESULT 23

LOCUS BY010148 121 bp mRNA linear EST 06-DEC-2002
DEFINITION BY010148 RIKEN full-length enriched, lung RCB-0558 LLC cDNA Mus
musculus cDNA clone G730017F01 5', mRNA sequence.

ACCESSION

BY010148

VERSION

BY010148.1 GI:26070397

KEYWORDS

EST.

SOURCE

Mus musculus (house mouse)

ORGANISM

Mus musculus

REFERENCE

1 (bases 1 to 121)

AUTHORS

Okazaki, Y., Furuno, M., Kasukawa, T., Adachi, J., Bono, H., Kondo, S.,
Nikaido, I., Osato, N., Saito, R., Suzuki, H., Yamanaka, I.,
Kiyosawa, H., Yagi, K., Tomaru, Y., Hasegawa, Y., Nogami, A.,
Schonbach, C., Gojobori, T., Baldarelli, R., Hill, D.P., Bult, C.,
Hume, D.A., Quackenbush, J., Schriml, L.M., Kanapin, A., Matsuda, H.,
Batalov, S., Beisel, K.W., Blake, J.A., Bradt, D., Brusic, V.,
Chothia, C., Corbani, L.E., Cousins, S., Dalia, E., Dragani, T.A.,
Fletcher, C.F., Forrest, A., Frazer, K.S., Gaasterland, T.,
Gariboldi, M., Gissi, C., Godzik, A., Gough, J., Grimmond, S.,
Gustincich, S., Hirokawa, N., Jackson, I.J., Jarvis, E.D., Kanai, A.,
Kawaji, H., Kawasawa, Y., Kedzierski, R.M., King, B.L., Konagaya, A.,
Kurochkin, I.V., Lee, Y., Lenhard, B., Lyons, P.A., Maglott, D.R.,
Maltais, L., Marchionni, L., McKenzie, L., Niki, H., Nagashima, T.,
Numata, K., Okido, T., Pavan, W.J., Perte, G., Pesole, G.,
Petrovsky, N., Pillai, R., Pontius, J.U., Qi, D., Ramchandran, S.,
Ravasi, T., Reed, J.C., Reid, D.J., Reid, J., Ring, B.Z., Ringwald, M.,
Sandelin, A., Schneider, C., Semple, C.A., Setou, M., Shimada, K.,
Sultana, R., Takenaka, Y., Taylor, M.S., Teasdale, R.D., Tomita, M.,
Verardo, R., Wagner, L., Walstedt, C., Wang, Y., Watanabe, Y.,
Wells, C., Wilming, L.G., Wyntshaw-Boris, A., Yanagisawa, M., Yang, I.,
Yang, L., Yuan, Z., Zavolan, M., Zhu, Y., Zimmer, A., Carninci, P.,
Hayatsu, N., Hirozane-Kishikawa, T., Konno, H., Nakamura, M.,
Sakazume, N., Sato, K., Shiraki, T., Waki, K., Kawai, J., Aizawa, K.,
Arakawa, T., Fukuda, S., Hara, A., Hashizume, W., Imotani, K., Ishii, Y.,
Itoh, M., Kagawa, I., Miyazaki, A., Sakai, K., Sasaki, D., Shibata, K.,
Shinagawa, A., Yasunishi, A., Yoshino, M., A., Yoshino, M., Lander, E.S.,
Rogers, J., Birney, E. and Hayashizaki, Y.

Analysis of the mouse transcriptome based on functional annotation

TITLE

Of 60,770 full-length cDNAs

JOURNAL

Nature 420, 563-573 (2002)

MEDLINE

12466851

COMMENT

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Laboratory for Genome Exploration Research Group, RIKEN Genomic
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The Institute of Physical and Chemical Research (RIKEN)

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Tel: 81-45-503-9222
Fax: 81-45-503-9216

Email: genome-res@gs.riken.jp, URL: <http://genome.gsc.riken.jp/>
Aizawa, K., Akimura, T., Arakawa, T., Carninci, P., Fukuda, S.,
Hirozane, T., Imotani, K., Ishii, Y., Itoh, M., Kawai, J., Konno, H.,
Miyazaki, A., Murata, M., Nakamura, M., Nomura, K., Numazaki, R.,
Ohno, M., Sakai, K., Sakazume, N., Sasaki, D., Sato, K., Shibata, K.,
Shiraki, T., Tagami, M., Waki, K., Watahiki, A., Muramatsu, M. and
Hayashizaki, Y. Direct Submission
Computational Analysis of Full-Length Mouse cDNAs Compared with
Human Genome Sequences Mamm. Genome. 12, 673-677 (2001)
Normalization and subtraction of cap-trapper-selected cDNAs to
prepare full-length cDNA libraries for rapid discovery of new
genes. Genome Res. 10 (10), 1617-1630 (2000)
RIKEN integrated sequence analysis (RISA) system--384-format
sequencing pipeline with 384 multicapillary sequencer. Genome Res.
10 (11), 1757-1771 (2000)

Computer-based methods for the mouse full-length cDNA
encyclopedia: real-time sequence clustering for construction of a
nonredundant cDNA library. Genome Res. 11 (2), 281-289 (2001)
cDNA library was prepared and sequenced in Mouse Genome
Encyclopedia Project of Genome Exploration Research Group in Riken
Genomic Sciences Center and Genome Science Laboratory in RIKEN.
Division of Experimental Animal Research in Riken contributed to
prepare mouse tissues.

Please visit our web site (<http://genome.gsc.riken.go.jp>) for
further details.

FEATURES

source

Location/Qualifiers
1..121
/organism="Mus musculus"
/mol_type="mRNA"
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/clone="G730017F01"
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/clone_lib="RIKEN full-length enriched, lung RCB-0558 LLC
cDNA"

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Qy 1 CGAACGTTTCG 10

Db 29 CGAACGTTTCG 38

RESULT 24

LOCUS

BY010148 121 bp mRNA linear EST 06-DEC-2002
DEFINITION BY010148 RIKEN full-length enriched, lung RCB-0558 LLC cDNA Mus
musculus cDNA clone G730017F01 5', mRNA sequence.

ACCESSION

BY010148

VERSION

BY010148.1 GI:26070397

KEYWORDS

EST.

SOURCE

Mus musculus (house mouse)

ORGANISM

Mus musculus

REFERENCE

1 (bases 1 to 121)

AUTHORS

Okazaki, Y., Furuno, M., Kasukawa, T., Adachi, J., Bono, H., Kondo, S.,
Nikaido, I., Osato, N., Saito, R., Suzuki, H., Yamanaka, I.,
Kiyosawa, H., Yagi, K., Tomaru, Y., Hasegawa, Y., Nogami, A.,
Schonbach, C., Gojobori, T., Baldarelli, R., Hill, D.P., Bult, C.,
Hume, D.A., Quackenbush, J., Schriml, L.M., Kanapin, A., Matsuda, H.,
Batalov, S., Beisel, K.W., Blake, J.A., Bradt, D., Brusic, V.,
Chothia, C., Corbani, L.E., Cousins, S., Dalia, E., Dragani, T.A.,
Fletcher, C.F., Forrest, A., Frazer, K.S., Gaasterland, T.,
Gariboldi, M., Gissi, C., Godzik, A., Gough, J., Grimmond, S.,
Gustincich, S., Hirokawa, N., Jackson, I.J., Jarvis, E.D., Kanai, A.,
Kawaji, H., Kawasawa, Y., Kedzierski, R.M., King, B.L., Konagaya, A.,

Kurochkin, I.V., Lee, Y., Lenhard, B., Lyons, P.A., Maglott, D.R., Maltais, L., Marchionni, L., McKenzie, L., Miki, H., Nagashima, T., Numata, K., Okido, T., Pavan, W.J., Perte, G., Pesole, G., Petrovsky, N., Pillai, R., Pontius, J.U., Qi, D., Ramachandran, S., Ravasi, T., Reed, J.C., Reed, D.J., Reid, J., Ring, B.Z., Ringwald, M., Sandelin, A., Schneider, C., Semple, C.A., Setou, M., Shimada, K., Sultana, R., Takenaka, Y., Taylor, M.S., Teasdale, R.D., Tomita, M., Verardo, R., Wagner, L., Wahlstedt, C., Wang, Y., Watanabe, Y., Wells, C., Wilming, L.G., Wynshaw-Boris, A., Yanagisawa, M., Yang, I., Yuan, Z., Zavolan, M., Zhu, Y., Zimmer, A., Carninci, P., Hayatsu, N., Hirozane-Kishikawa, T., Konno, H., Nakamura, M., Sakazume, N., Sato, K., Shiraki, T., Waki, K., Kawai, J., Aizawa, K., Arakawa, T., Fukuda, S., Hara, A., Hashizume, W., Imotani, K., Ishii, Y., Itoh, M., Kagawa, I., Miyazaki, A., Sakai, K., Sasaki, D., Shibata, K., Shingawa, A., Yasunishi, A., Yoshino, M., Waterston, R., Lander, E.S., Rogers, J., Birney, E. and Hayashizaki, Y.

Analysis of the mouse transcriptome based on functional annotation of 60,770 full-length cDNAs

Nature 420, 563-573 (2002)

22354683

1246851

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The Institute of Physical and Chemical Research (RIKEN)

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Tel: 81-45-503-9222

Fax: 81-45-503-9216

Email: genome-res@sc.riken.jp, URL: http://genome.gsc.riken.jp/

Aizawa, K., Akimura, T., Arakawa, T., Carninci, P., Fukuda, S., Hirozane, T., Imotani, K., Ishii, Y., Itoh, M., Kawai, J., Konno, H., Miyazaki, A., Murata, M., Nakamura, M., Nomura, K., Numazaki, R., Ohno, M., Sakai, K., Sakazume, N., Sasaki, D., Sato, K., Shibata, K., Shiraki, T., Tagami, M., Waki, K., Watahiki, A., Muramatsu, M. and Hayashizaki, Y. Direct Submission

Computational Analysis of Full-length Mouse cDNAs Compared with Human Genome Sequences Mamm. Genome. 12, 673-677 (2001)

Normalization and subtraction of cap-trapper-selected cDNAs to prepare full-length cDNA libraries for rapid discovery of new genes. Genome Res. 10 (10), 1617-1630 (2000)

RIKEN integrated sequence analysis (RISA) system--384-format sequencing pipeline with 384 multicapillary sequencer. Genome Res. 10 (11), 1757-1771 (2000)

Computer-based methods for the mouse full-length cDNA encyclopedia: real-time sequence clustering for construction of a nonredundant cDNA library. Genome Res. 11 (2), 281-289 (2001)

cDNA library was prepared and sequenced in Mouse Genome Encyclopedia Project of Genome Exploration Research Group in Riken Genomic Sciences Center and Genome Science Laboratory in RIKEN. Division of Experimental Animal Research in Riken contributed to prepare mouse tissues.

Please visit our web site (<http://genome.gsc.riken.go.jp>) for further details.

FEATURES

source

Location/Qualifiers

1. .121

/organism="Mus musculus"

/mol_type="mRNA"

/db_xref="taxon:10090"

/clone="G730017F01"

/tissue_type="lung"

/cell_line="RCB-0558 LLC"

/clone_lib="RIKEN full-length enriched, lung RCB-0558 LLC cDNA"

ORIGIN

Query Match

Best Local Similarity

Matches

10; Conservative

0; Mismatches

0; Indels

0; Gaps

0;

Qy

1 CGAAGCTTCG 10

|||||

Db

38 CGAAGCTTCG 29

RESULT 25

CB093820

LOCUS

DEFINITION

ACCESSION

VERSION

KEYWORDS

SOURCE

ORGANISM

REFERENCE

AUTHORS

TITLE

JOURNAL

COMMENT

source

Location/Qualifiers

1. .123

/organism="Cycas rumphii"

/mol_type="mRNA"

/db_xref="taxon:58031"

/clone="ze47a04"

/sex="Female"

/clone_lib="Cycad Leaf Library (NYBG)"

/notes="Organ: Young leaf; Vector: pBK-CMV; Site 1: Xho I; Site 2: Eco RI; Date: Completed 09/01/2001. Submitted to CSHL-09/05/2001. Sample: Young emergent leaves. From New York Botanical Garden Conservatory accession number 808/59 A collected 03/2001. Library: Made using Stratagene's ZAP Express Vector Kit. Library was size fractionated for large inserts."

ORIGIN

Query Match

Best Local Similarity

Matches

10; Conservative

0; Mismatches

0; Indels

0; Gaps

0;

Qy

1 CGAAGCTTCG 10

|||||

Db

91 CGAAGCTTCG 100

RESULT 25

CB093820

LOCUS

DEFINITION

ACCESSION

VERSION

KEYWORDS

SOURCE

ORGANISM

REFERENCE

AUTHORS

TITLE

JOURNAL

COMMENT

source

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/organism="Cycas rumphii"

/mol_type="mRNA"

/db_xref="taxon:58031"

/clone="ze47a04"

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/clone_lib="Cycad Leaf Library (NYBG)"

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Query Match

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1 CGAAGCTTCG 10

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/organism="Mus musculus"

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Qy

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REFERENCE

AUTHORS

TITLE

JOURNAL

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REFERENCE

AUTHORS

TITLE

JOURNAL

COMMENT

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Location/Qualifiers

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/organism="Cycas rumphii"

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0; Indels

0; Gaps

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LOCUS

DEFINITION

ACCESSION

VERSION

KEYWORDS

SOURCE

ORGANISM

REFERENCE

AUTHORS

TITLE

JOURNAL

COMMENT

source

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/organism="Cycas rumphii"

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Matches

10; Conservative

0; Mismatches

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0; Gaps

0;

Qy

1 CGAAGCTTCG 10

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91 CGAAGCTTCG 100

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Location/Qualifiers

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/organism="Mus musculus"

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/clone_lib="RIKEN full-length enriched, lung RCB-0558 LLC cDNA"

ORIGIN

Query Match

Best Local Similarity

Matches

COMMENT

Contact: W. Richard McCombie
 Lita Annenberg Hazen Genome Sequencing Center
 Cold Spring Harbor Laboratory
 PO Box 100, Cold Spring Harbor, NY 11724, USA
 Tel: 516 367 8884
 Fax: 516 367 8874
 Email: mcombie@cshl.org
 Plate: ze47 row: a column: 04
 Seq primer: -21M13UnivRev
 High quality sequence stop: 123.

FEATURES

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 /note="Organ: Young leaf; Vector: pBK-CMV; Site 1: Xho I;
 Site 2: Eco RI; Date: Completed 09/01/2001. Submitted to
 CSHL 09/05/2001. Sample: Young emergent leaves. From New
 York Botanical Garden Conservatory accession number 808/59
 A (collected 03/2001). Library: Made using Stratagene's
 ZAP Express Vector Kit. Library was size fractionated for
 large inserts."

ORIGIN

Query Match 100.0%; Score 10; DB 6; Length 123;
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Qy 1 CGAACGTTTCG 10
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Db 100 CGAACGTTTCG 91

RESULT 27

BH223637 1006114A09.y1 1006 - RescueMu Grid G Zea mays genomic, genomic
 LOCUS survey sequence.
 DEFINITION

ACCESSION BH223637
 VERSION BH223637.1 GI:16819804

KEYWORDS

SOURCE Zea mays

ORGANISM Zea mays

REFERENCE

AUTHORS Walbot,V.
 TITLE Maize genomic sequences found using engineered RescueMu transposon
 JOURNAL Unpublished (2001)
 COMMENT Contact: Walbot V

Department of Biological Sciences

Stanford University

855 California Ave, Palo Alto, CA 94304, USA

Tel: 650 723 2227

Fax: 650 725 8221

Email: walbot@stanford.edu

Possible ligation site so sequence was trimmed. Post-ligation

sequence submitted separately.

Plate: 1006114 row: 11

Class: transposon-tagged.

Location/Qualifiers

source

1. .123

/organism="Zea mays"

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/lab_host="DH10B"

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Db 33 CGAACGTTTCG 42

RESULT 28

BH223637/c

LOCUS BH223637

DEFINITION 1006114A09.y1 1006 - RescueMu Grid G Zea mays genomic, genomic

survey sequence.

ACCESSION BH223637

VERSION BH223637.1 GI:16819804

KEYWORDS GSS.

SOURCE Zea mays

ORGANISM Zea mays

REFERENCE

AUTHORS Walbot,V.

TITLE Maize genomic sequences found using engineered RescueMu transposon

JOURNAL Unpublished (2001)

COMMENT Contact: Walbot V

Department of Biological Sciences

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Possible ligation site so sequence was trimmed. Post-ligation

sequence submitted separately.

Plate: 1006114 row: 11

Class: transposon-tagged.

Location/Qualifiers

source

1. .123

/organism="Zea mays"

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/cultivar="mixed background W23/A188/B73"

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/clone_lib="1006 - RescueMu Grid G"

/note="Organ: leaf; Vector: RescueMu (engineered from

pBlueScript backbone); Site 1: BamHI; Site 2: BglII;

RescueMu is a 4.9 kb, modified maize Mu transposon

designed to allow plasmid rescue from total genomic DNA.

Mu elements insert preferentially into transcription

units. For more information on RescueMu, go to the web

site 'www.zmdb.iastate.edu' and follow the links for

'RescueMu.' Grid G was grown at Stanford in 2000. DNA was

extracted from leaf punches, double digested using BamHI

and BglII, and ligated to form circular plasmids. DH10B

cells were transformed and then screened on LB plates with

/clone_lib="1006 - RescueMu Grid G"
 /note="Organ: leaf; Vector: RescueMu (engineered from
 pBlueScript backbone); Site 1: BamHI; Site 2: BglII;
 RescueMu is a 4.9 kb, modified maize Mu transposon
 designed to allow plasmid rescue from total genomic DNA.
 Mu elements insert preferentially into transcription
 units. For more information on RescueMu, go to the web
 site 'www.zmdb.iastate.edu' and follow the links for
 'RescueMu.' Grid G was grown at Stanford in 2000. DNA was
 extracted from leaf punches, double digested using BamHI
 and BglII, and ligated to form circular plasmids. DH10B
 cells were transformed and then screened on LB plates with
 ampicillin."

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ORIGIN
Query Match      100.0%; Score 10; DB 8; Length 123;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 42 CGAACGTTTCG 33

RESULT 29
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DEFINITION tbt_000543 Normalized Nicotiana tabacum cDNA library Nicotiana
ACCESSION CV020018
VERSION CV020018.1 GI:51461526
KEYWORDS EST.
SOURCE Nicotiana tabacum (common tobacco)
ORGANISM Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
asterids; lamids; Solanales; Solanaceae; Nicotiana.
REFERENCE 1 (bases 1 to 128)
AUTHORS Li,W.Z., Shao,Y., Li,Y.P., Lu,X.P., Montero,D.C., Alvarez,S.P.,
Deng,Y., Jin,Q.C., Wang,S., Dai,C.E., Zeng,Z.L., Wang,Y.Q.,
Dong,H.T. and Li,D.B.
TITLE Large-scale identification of ESTs from Nicotiana tabacum by
normalized cDNA library sequencing
JOURNAL Unpublished (2004)
COMMENT Contact: Wenzheng Li, Yan Shao, Yongping Li, Xiuping Lu, Limin
Song, Haitao Dong, Debao Li
The Tobacco Science Research Institute of Yunnan Province; Yunnan
Provincial Tobacco Group Dali Branch; Bioinformatics and Gene
Network Research Group, Zhejiang University
The Tobacco Science Research Institute of Yunnan Province, Yuxi
653100, China
Email: webmaster@estarray.org, URL: http://www.estarray.org
Only the high quality region of sequence was submitted.
Seq primer: M13.
Location/Qualifiers
source 1..128
/organism="Nicotiana tabacum"
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/db_xref="taxon:4097"
/clone="tbt_000543"
/tissue_type="Mixed"
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/note="Vector: pBS-SK+"

ORIGIN
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Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 74 CGAACGTTTCG 65

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ACCESSION CV070597
VERSION CV070597.1 GI:45846654
KEYWORDS EST.
SOURCE Sus scrofa (pig)
ORGANISM Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae; Sus.
REFERENCE 1 (bases 1 to 131)
AUTHORS Smith,T.P.L., Freking,B.A., Ford,J.J., Vallet,J.L., Fox,J.,
Wise,T.A., Noneman,D.J., Wray,J.E. and Keele,J.W.
TITLE A second set of porcine ESTs from a pooled-tissue normalized
library
JOURNAL Unpublished (2003)
COMMENT Contact: Smith TPL
USDA, ARS, US Meat Animal Research Center
PO Box 166, Clay Center, NE 68933-0166, USA
Tel: 402 762 4366
Fax: 402 762 4390
Email: smith@email.marc.usda.gov
Single pass sequencing. Bases called with phred v0.020425.c and
trimmed with the aid of the trim_alt option. Vector identified with
cross_match v0.990329.
Plate: SRG8027 row: L column: 16
Seq primer: GTAATACGACTCATATAGG.
Location/Qualifiers
source 1..131
/organism="Sus scrofa"
/mol_type="mRNA"
/db_xref="taxon:9823"
/tissue_type="pooled"

ORIGIN
Query Match      100.0%; Score 10; DB 7; Length 128;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 65 CGAACGTTTCG 74

RESULT 30
LOCUS CV020018/c
DEFINITION tbt_000543 Normalized Nicotiana tabacum cDNA library Nicotiana
ACCESSION CV020018
VERSION CV020018.1 GI:51461526
KEYWORDS EST.
SOURCE Nicotiana tabacum (common tobacco)
ORGANISM Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;

```

```

Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
asterids; lamids; Solanales; Solanaceae; Nicotiana.
REFERENCE 1 (bases 1 to 128)
AUTHORS Li,W.Z., Shao,Y., Li,Y.P., Lu,X.P., Montero,D.C., Alvarez,S.P.,
Deng,Y., Jin,Q.C., Wang,S., Dai,C.E., Zeng,Z.L., Wang,Y.Q.,
Dong,H.T. and Li,D.B.
TITLE Large-scale identification of ESTs from Nicotiana tabacum by
normalized cDNA library sequencing
JOURNAL Unpublished (2004)
COMMENT Contact: Wenzheng Li, Yan Shao, Yongping Li, Xiuping Lu, Limin
Song, Haitao Dong, Debao Li
The Tobacco Science Research Institute of Yunnan Province; Yunnan
Provincial Tobacco Group Dali Branch; Bioinformatics and Gene
Network Research Group, Zhejiang University
The Tobacco Science Research Institute of Yunnan Province, Yuxi
653100, China
Email: webmaster@estarray.org, URL: http://www.estarray.org
Only the high quality region of sequence was submitted.
Seq primer: M13.
Location/Qualifiers
source 1..128
/organism="Nicotiana tabacum"
/mol_type="mRNA"
/db_xref="taxon:4097"
/clone="tbt_000543"
/tissue_type="Mixed"
/clone_lib="Normalized Nicotiana tabacum cDNA library"
/note="Vector: pBS-SK+"

ORIGIN
Query Match      100.0%; Score 10; DB 7; Length 128;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 74 CGAACGTTTCG 65

RESULT 31
LOCUS CV070597
DEFINITION 857252 MARC 3P1G Sus scrofa cDNA 5', mRNA sequence.
ACCESSION CV070597
VERSION CV070597.1 GI:45846654
KEYWORDS EST.
SOURCE Sus scrofa (pig)
ORGANISM Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae; Sus.
REFERENCE 1 (bases 1 to 131)
AUTHORS Smith,T.P.L., Freking,B.A., Ford,J.J., Vallet,J.L., Fox,J.,
Wise,T.A., Noneman,D.J., Wray,J.E. and Keele,J.W.
TITLE A second set of porcine ESTs from a pooled-tissue normalized
library
JOURNAL Unpublished (2003)
COMMENT Contact: Smith TPL
USDA, ARS, US Meat Animal Research Center
PO Box 166, Clay Center, NE 68933-0166, USA
Tel: 402 762 4366
Fax: 402 762 4390
Email: smith@email.marc.usda.gov
Single pass sequencing. Bases called with phred v0.020425.c and
trimmed with the aid of the trim_alt option. Vector identified with
cross_match v0.990329.
Plate: SRG8027 row: L column: 16
Seq primer: GTAATACGACTCATATAGG.
Location/Qualifiers
source 1..131
/organism="Sus scrofa"
/mol_type="mRNA"
/db_xref="taxon:9823"
/tissue_type="pooled"

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/lab host="DH10B"
/clone lib="MARC 3P1G"
/note="Vector: pcDNA3.1; Site 1: EcoRI; Site 2: NotI;
Library made with RNA pooled from multiple tissues
including brain, liver, muscle, placenta/endometrium,
ovary, testes, and bone marrow."

ORIGIN
Query Match      100.0%; Score 10; DB 7; Length 131;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
    |||||
Db 88 CGAACGTTTCG 97

RESULT 32
CN070597/c
LOCUS      131 bp      mRNA      linear      EST 30-MAR-2004
DEFINITION 857252 MARC 3P1G Sus scrofa cDNA 5', mRNA sequence.
ACCESSION  CN070597
VERSION     CN070597.1 GI:45846654
KEYWORDS   EST.
SOURCE     Sus scrofa (pig)
ORGANISM   Sus scrofa
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae; Sus.
REFERENCE  1 (bases 1 to 131)
AUTHORS   Smith,T.P.L., Freking,B.A., Ford,J.J., Vallet,J.L., Fox,J.,
            Wise,T.A., Nonneman,D.J., Wray,J.E. and Keele,J.W.
TITLE     A second set of porcine ESTs from a pooled-tissue normalized
            library
JOURNAL   Unpublished (2003)
COMMENT   Contact: Smith TPL
            USDA, ARS, US Meat Animal Research Center
            PO Box 166, Clay Center, NE 68933-0166, USA
            Tel: 402 762 4366
            Fax: 402 762 4390
            Email: smith@email.marc.usda.gov
            Single pass sequencing. Bases called with phred v0.020425.c and
            trimmed with the aid of the trim_alt option. Vector identified with
            cross_match v0.990329.
            Plate: SRG8027 row: L column: 16
            Seq primer: GTAATACGACCTACTATAGGG.

FEATURES             source
            1..131
                Location/Qualifiers
                /organism="Sus scrofa"
                /mol_type="mRNA"
                /db_xref="taxon:9823"
                /tissue_type="pooled"
                /lab host="DH10B"
                /clone lib="MARC 3P1G"
                /note="Vector: pcDNA3.1; Site 1: EcoRI; Site 2: NotI;
                Library made with RNA pooled from multiple tissues
                including brain, liver, muscle, placenta/endometrium,
                ovary, testes, and bone marrow."

ORIGIN
Query Match      100.0%; Score 10; DB 7; Length 131;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
    |||||
Db 97 CGAACGTTTCG 88

RESULT 33
CV017529
LOCUS      132 bp      mRNA      linear      EST 19-AUG-2004
DEFINITION tbt_010370 Normalized Nicotiana tabacum cDNA library Nicotiana
            tabacum cDNA clone tbt_010370 5', mRNA sequence.

```

```

ACCESSION  CV017529
VERSION    CV017529.1 GI:51455881
KEYWORDS   EST.
SOURCE     Nicotiana tabacum (common tobacco)
ORGANISM   Nicotiana tabacum
            Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
            Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
            asterids; lamids; Solanales; Solanaceae; Nicotiana.
REFERENCE  1 (bases 1 to 132)
AUTHORS   Li,W.Z., Shao,Y., Li,Y.P., Lu,X.P., Montero,D.C., Alvarez,S.P.,
            Deng,Y., Jin,Q.C., Wang,S., Dai,C.E., Zeng,Z.L., Wang,Y.Q.,
            Dong,H.T. and Li,D.B.
TITLE     Large-scale identification of ESTs from Nicotiana tabacum by
            normalized cDNA library sequencing
JOURNAL   Unpublished (2004)
COMMENT   Contact: Wenzheng Li,Yan Shao,Yongping Li,Xiuping Lu,Limin
            Song,Haitao Dong,Debao Li
            The Tobacco Science Research Institute of Yunnan Province; Yunnan
            Provincial Tobacco Group Dali Branch; Bioinformatics and Gene
            Network Research Group, Zhejiang University
            The Tobacco Science Research Institute of Yunnan Province, Yuxi
            653100, China
            Email: webmaster@estarray.org, URL: http://www.estarray.org
            Only the high quality region of sequence was submitted.
            Seq primer: M13.

FEATURES             source
            1..132
                Location/Qualifiers
                /organism="Nicotiana tabacum"
                /mol_type="mRNA"
                /db_xref="taxon:4097"
                /clone="tbt_010370"
                /tissue_type="Mixed"
                /clone_lib="Normalized Nicotiana tabacum cDNA library"
                /note="Vector: pBS-SK+"

ORIGIN
Query Match      100.0%; Score 10; DB 7; Length 132;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
    |||||
Db 47 CGAACGTTTCG 56

RESULT 34
CV017529/c
LOCUS      132 bp      mRNA      linear      EST 19-AUG-2004
DEFINITION tbt_010370 Normalized Nicotiana tabacum cDNA library Nicotiana
            tabacum cDNA clone tbt_010370 5', mRNA sequence.
ACCESSION  CV017529
VERSION    CV017529.1 GI:51455881
KEYWORDS   EST.
SOURCE     Nicotiana tabacum (common tobacco)
ORGANISM   Nicotiana tabacum
            Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
            Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
            asterids; lamids; Solanales; Solanaceae; Nicotiana.
REFERENCE  1 (bases 1 to 132)
AUTHORS   Li,W.Z., Shao,Y., Li,Y.P., Lu,X.P., Montero,D.C., Alvarez,S.P.,
            Deng,Y., Jin,Q.C., Wang,S., Dai,C.E., Zeng,Z.L., Wang,Y.Q.,
            Dong,H.T. and Li,D.B.
TITLE     Large-scale identification of ESTs from Nicotiana tabacum by
            normalized cDNA library sequencing
JOURNAL   Unpublished (2004)
COMMENT   Contact: Wenzheng Li,Yan Shao,Yongping Li,Xiuping Lu,Limin
            Song,Haitao Dong,Debao Li
            The Tobacco Science Research Institute of Yunnan Province; Yunnan
            Provincial Tobacco Group Dali Branch; Bioinformatics and Gene
            Network Research Group, Zhejiang University
            The Tobacco Science Research Institute of Yunnan Province, Yuxi
            653100, China
            Email: webmaster@estarray.org, URL: http://www.estarray.org

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Only the high quality region of sequence was submitted.

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FEATURES
  source
    1. .132
    /organism="Nicotiana tabacum"
    /mol_type="mRNA"
    /db_xref="taxon:4097"
    /clone="tbt_010370"
    /tissue_type="Mixed"
    /clone_lib="Normalized Nicotiana tabacum cDNA library"
    /note="Vector: pBS-SK+"

ORIGIN
Query Match      100.0%; Score 10; DB 7; Length 132;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 56 CGAACGTTTCG 47

RESULT 35
LOCUS CV298664 133 bp mRNA linear EST 23-SEP-2004
DEFINITION EST87123 petunia floral post-pollination cDNA library Petunia x hybrida cDNA clone Petunia-PP-10-G03 5' end, mRNA sequence.
ACCESSION CV298664
VERSION CV298664.1 GI:52592185
KEYWORDS EST.
SOURCE Petunia x hybrida
ORGANISM Petunia x hybrida
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
asterids; lamids; Solanales; Solanaceae; Petunia.
REFERENCE 1 (bases 1 to 133)
AUTHORS Shibuya,K., Underwood,B., Loucas,H., Farmerie,W., Jones,M. and Clark,D.
TITLE Petunia x hybrida EST collection
JOURNAL Unpublished (2004)
COMMENT Contact: David Clark
UF floriculture Biotechnology Lab
University of Florida
Environmental Horticulture Department, 1545 Fifield Hall, Box 110670, Gainesville, FL 32611-0670, USA
Tel: 352-392-1831 x370
Fax: 352-392-3870
Email: dclark@mail.ifas.ufl.edu
Contact Dr. Clark (dclark@mail.ifas.ufl.edu) for clone information
Seq primer: T3 primer.
Location/Qualifiers
  source
    1. .133
    /organism="Petunia x hybrida"
    /mol_type="mRNA"
    /cultivar="Mitchell Diploid (aka. Mitchell, aka W115 in Europe)"
    /db_xref="taxon:4102"
    /clone="Petunia-PP-10-G03"
    /tissue_type="all floral organs"
    /lab_host="lambda ZAPII unidirectional"
    /clone_lib="petunia floral post-pollination cDNA library"
    /note="Vector: pBluescript SK-; Site 1: EcoRI; Site 2: XhoI; supplier: Petunia x hybrida cv. Mitchell Diploid plants were grown from seeds to a fully flowering stage under standard greenhouse conditions. Flowers at anthesis stage were self-pollinated and entire flowers were collected at 0, 5, 10, 24, 36 and 48 hours after pollination from plants grown in standard greenhouses. Total RNA was extracted from each sample, and 100 micrograms of each sample was combined for subsequent poly A+ mRNA selection and cDNA synthesis."

FEATURES
  source
    1. .133
    /organism="Petunia x hybrida"
    /mol_type="mRNA"
    /cultivar="Mitchell Diploid (aka. Mitchell, aka W115 in Europe)"
    /db_xref="taxon:4102"
    /clone="Petunia-PP-10-G03"
    /tissue_type="all floral organs"
    /lab_host="lambda ZAPII unidirectional"
    /clone_lib="petunia floral post-pollination cDNA library"
    /note="Vector: pBluescript SK-; Site 1: EcoRI; Site 2: XhoI; supplier: Petunia x hybrida cv. Mitchell Diploid plants were grown from seeds to a fully flowering stage under standard greenhouse conditions. Flowers at anthesis stage were self-pollinated and entire flowers were collected at 0, 5, 10, 24, 36 and 48 hours after pollination from plants grown in standard greenhouses. Total RNA was extracted from each sample, and 100 micrograms of each sample was combined for subsequent poly A+ mRNA selection and cDNA synthesis."

ORIGIN
Query Match      100.0%; Score 10; DB 7; Length 133;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 128 CGAACGTTTCG 119

RESULT 37
LOCUS CG780524 133 bp DNA linear GSS 29-OCT-2003
DEFINITION 1123040C05.y1 1123 - RescueMu Grid L Zea mays genomic, genomic

```

```

Query Match      100.0%; Score 10; DB 7; Length 133;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 119 CGAACGTTTCG 128

RESULT 36
LOCUS CV298664 133 bp mRNA linear EST 23-SEP-2004
DEFINITION EST87123 petunia floral post-pollination cDNA library Petunia x hybrida cDNA clone Petunia-PP-10-G03 5' end, mRNA sequence.
ACCESSION CV298664
VERSION CV298664.1 GI:52592185
KEYWORDS EST.
SOURCE Petunia x hybrida
ORGANISM Petunia x hybrida
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
asterids; lamids; Solanales; Solanaceae; Petunia.
REFERENCE 1 (bases 1 to 133)
AUTHORS Shibuya,K., Underwood,B., Loucas,H., Farmerie,W., Jones,M. and Clark,D.
TITLE Petunia x hybrida EST collection
JOURNAL Unpublished (2004)
COMMENT Contact: David Clark
UF floriculture Biotechnology Lab
University of Florida
Environmental Horticulture Department, 1545 Fifield Hall, Box 110670, Gainesville, FL 32611-0670, USA
Tel: 352-392-1831 x370
Fax: 352-392-3870
Email: dclark@mail.ifas.ufl.edu
Contact Dr. Clark (dclark@mail.ifas.ufl.edu) for clone information
Seq primer: T3 primer.
Location/Qualifiers
  source
    1. .133
    /organism="Petunia x hybrida"
    /mol_type="mRNA"
    /cultivar="Mitchell Diploid (aka. Mitchell, aka W115 in Europe)"
    /db_xref="taxon:4102"
    /clone="Petunia-PP-10-G03"
    /tissue_type="all floral organs"
    /lab_host="lambda ZAPII unidirectional"
    /clone_lib="petunia floral post-pollination cDNA library"
    /note="Vector: pBluescript SK-; Site 1: EcoRI; Site 2: XhoI; supplier: Petunia x hybrida cv. Mitchell Diploid plants were grown from seeds to a fully flowering stage under standard greenhouse conditions. Flowers at anthesis stage were self-pollinated and entire flowers were collected at 0, 5, 10, 24, 36 and 48 hours after pollination from plants grown in standard greenhouses. Total RNA was extracted from each sample, and 100 micrograms of each sample was combined for subsequent poly A+ mRNA selection and cDNA synthesis."

ORIGIN
Query Match      100.0%; Score 10; DB 7; Length 133;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 128 CGAACGTTTCG 119

RESULT 37
LOCUS CG780524 133 bp DNA linear GSS 29-OCT-2003
DEFINITION 1123040C05.y1 1123 - RescueMu Grid L Zea mays genomic, genomic

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```

survey sequence.
CG780524
VERSION CG780524.1 GI:38041313
KEYWORDS GSS.
SOURCE Zea mays
ORGANISM Zea mays

REFERENCE
AUTHORS Walbot, V.
TITLE Maize genomic sequences found using engineered RescueMu transposon
JOURNAL Unpublished (2001)
COMMENT Contact: Walbot V
Department of Biological Sciences
Stanford University
855 California Ave, Palo Alto, CA 94304, USA
Tel: 650 723 2227
Fax: 650 725 8221
Email: walbot@stanford.edu
Plate: 1123040 row: 15
Class: transposon-tagged.
Location/Qualifiers
1. .133
/organism="Zea mays"
/mol_type="genomic DNA"
/cultivar="mixed background W23/A188/B73/K55"
/db_xref="taxon:4577"
/tissue_type="leaf"
/dev_stage="adult"
/lab_host="DH10B"
/clone_lib="1123 - RescueMu Grid L"
/note="Organ: leaf; Vector: RescueMu (engineered from
pBluescript backbone); Site 1: BamHI; Site 2: BglII;
RescueMu is a 4.9 kb, modified maize Mu transposon
designed to allow plasmid rescue from total genomic DNA.
Mu elements insert preferentially into transcription
units. For more information on RescueMu, go to the web
site 'www.zmdb.iastate.edu' and follow the links for
'RescueMu.' Grid L was grown in Molokai in 2001. DNA was
extracted from leaf strips, double digested using BamHI
and BglII, and ligated to form circular plasmids. DH10B
cells were transformed and then screened on LB plates with
ampicillin."

ORIGIN
Query Match 100.0%; Score 10; DB 9; Length 133;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
|||||
Db 74 CGAACGTTTCG 83

RESULT 38
CG780524/c
LOCUS 1123040C05.y1 1123 - RescueMu Grid L Zea mays genomic, GSS 29-OCT-2003
DEFINITION survey sequence.
ACCESSION CG780524
VERSION CG780524.1 GI:38041313
KEYWORDS GSS.
SOURCE Zea mays
ORGANISM Zea mays
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD
clade; Panicoideae; Andropogoneae; Zea.
1 (bases 1 to 133)
Walbot, V.
TITLE Maize genomic sequences found using engineered RescueMu transposon
JOURNAL Unpublished (2001)
COMMENT Contact: Walbot V

survey sequence.
CG780524
VERSION CG780524.1 GI:38041313
KEYWORDS GSS.
SOURCE Zea mays
ORGANISM Zea mays
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD
clade; Panicoideae; Andropogoneae; Zea.
1 (bases 1 to 133)
Walbot, V.
TITLE Maize genomic sequences found using engineered RescueMu transposon
JOURNAL Unpublished (2001)
COMMENT Contact: Walbot V

```

```

Department of Biological Sciences
Stanford University
855 California Ave, Palo Alto, CA 94304, USA
Tel: 650 723 2227
Fax: 650 725 8221
Email: walbot@stanford.edu
Plate: 1123040 row: 15
Class: transposon-tagged.
Location/Qualifiers
1. .133
/organism="Zea mays"
/mol_type="genomic DNA"
/cultivar="mixed background W23/A188/B73/K55"
/db_xref="taxon:4577"
/tissue_type="leaf"
/dev_stage="adult"
/lab_host="DH10B"
/clone_lib="1123 - RescueMu Grid L"
/note="Organ: leaf; Vector: RescueMu (engineered from
pBluescript backbone); Site 1: BamHI; Site 2: BglII;
RescueMu is a 4.9 kb, modified maize Mu transposon
designed to allow plasmid rescue from total genomic DNA.
Mu elements insert preferentially into transcription
units. For more information on RescueMu, go to the web
site 'www.zmdb.iastate.edu' and follow the links for
'RescueMu.' Grid L was grown in Molokai in 2001. DNA was
extracted from leaf strips, double digested using BamHI
and BglII, and ligated to form circular plasmids. DH10B
cells were transformed and then screened on LB plates with
ampicillin."

ORIGIN
Query Match 100.0%; Score 10; DB 9; Length 133;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
|||||
Db 83 CGAACGTTTCG 74

RESULT 39
CV019988
LOCUS 140 bp mRNA linear EST 19-AUG-2004
DEFINITION tbt_009482 Normalized Nicotiana tabacum cDNA library Nicotiana
tabacum cDNA clone tbt_009482 5', mRNA sequence.
ACCESSION CV019988
VERSION CV019988.1 GI:51461496
KEYWORDS EST.
SOURCE Nicotiana tabacum (common tobacco)
ORGANISM Nicotiana tabacum
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
asterids; lamids; Solanales; Solanaceae; Nicotiana.
1 (bases 1 to 140)
Li, W.Z., Shao, Y., Li, Y.P., Lu, X.P., Montero, D.C., Alvarez, S.P.,
Deng, Y., Jin, Q.C., Wang, S., Dai, C.E., Zeng, Z.L., Wang, Y.Q.,
Dong, H.T. and Li, D.B.
Large-scale identification of ESTs from Nicotiana tabacum by
normalized cDNA library sequencing
Unpublished (2004)
Contact: Wenzheng Li, Yan Shao, Yongping Li, Xiuping Lu, Limin
Song, Haitao Dong, Debao Li
The Tobacco Science Research Institute of Yunnan Province; Yunnan
Provincial Tobacco Group Dali Branch; Bioinformatics and Gene
Network Research Group, Zhejiang University
The Tobacco Science Research Institute of Yunnan Province, Yuxi
653100, China
Email: webmaster@estarray.org, URL: http://www.estarray.org
Only the high quality region of sequence was submitted.
Seq primer: M13.
Location/Qualifiers
1. .140

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/organism="Nicotiana tabacum"
/mol_type="mRNA"
/db_xref="taxon:4097"
/clone="tbt_009482"
/tissue_type="Mixed"
/clone_lib="Normalized Nicotiana tabacum cDNA library"
/note="Vector: pBS-SK+"

ORIGIN
Query Match      100.0%; Score 10; DB 7; Length 140;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
    |||||
Db 58 CGAACGTTTCG 67

RESULT 40
CV019988/c
LOCUS
DEFINITION tbt_009482 Normalized Nicotiana tabacum cDNA library Nicotiana
tabacum cDNA clone tbt_009482 5', mRNA sequence.
ACCESSION CV019988
VERSION CV019988.1 GI:51461496
KEYWORDS EST.
SOURCE Nicotiana tabacum (common tobacco)
ORGANISM Nicotiana tabacum
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
asterids; lamids; Solanales; Solanaceae; Nicotiana.
REFERENCE 1 (bases 1 to 140)
AUTHORS Li,W.Z., Shao,Y., Li,Y.P., Lu,X.P., Montero,D.C., Alvarez,S.P.,
Deng,Y., Jin,Q.C., Wang,S., Dai,C.E., Zeng,Z.L., Wang,Y.Q.,
Dong,H.T. and Li,D.B.
TITLE Large-scale identification of ESTs from Nicotiana tabacum by
normalized cDNA library sequencing
JOURNAL Unpublished (2004)
COMMENT Contact: Wenzheng Li, Yan Shao, Yongping Li, Xiuping Lu, Limin
Song, Haitao Dong, Debao Li
The Tobacco Science Research Institute of Yunnan Province; Yunnan
Provincial Tobacco Group Dali Branch; Bioinformatics and Gene
Network Research Group, Zhejiang University
The Tobacco Science Research Institute of Yunnan Province, Yuxi
653100, China
Email: webmaster@estarray.org, URL: http://www.estarray.org
Only the high quality region of sequence was submitted.
Seq primer: M13.
FEATURES
source
Location/Qualifiers
1..140
/organism="Nicotiana tabacum"
/mol_type="mRNA"
/db_xref="taxon:4097"
/clone="tbt_009482"
/tissue_type="Mixed"
/clone_lib="Normalized Nicotiana tabacum cDNA library"
/note="Vector: pBS-SK+"

ORIGIN
Query Match      100.0%; Score 10; DB 7; Length 140;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
    |||||
Db 67 CGAACGTTTCG 58

RESULT 41
CV0720290
LOCUS
DEFINITION tai4lh07.y1 HyEch JUMY T1 Hydractinia echinata cDNA 5', mRNA
sequence.
ACCESSION CV0720290
VERSION CV0720290.1 GI:50697178
KEYWORDS EST.
SOURCE Hydractinia echinata
Eukaryota; Metazoa; Cnidaria; Hydrozoa; Hydrozoa; Anthomedusae;
Hydractiniidae; Hydractinia.
REFERENCE 1 (bases 1 to 148)
AUTHORS Bode,H., Blumberg,B., Steele,R., Wigge,P., Gee,L., Nguyen,Q.,
Martinez,D., Kibler,D., Hampson,S., Clifton,S., Pape,D., Marra,M.,
Hillier,L., Martin,J., Wylie,T., Dante,M., Theising,B., Bowers,Y.,
Gibbons,M., Ritter,E., Bennett,J., Ronko,I., Tsagareishvili,R.,
Meguire,L., Kennedy,S., Waterston,R. and Wilson,R.
WashU Hydra EST Project
Contact: Hans Bode
WashU Hydra EST Project
Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108, USA
Tel: 314 286 1800
Fax: 314 286 1810
Email: est@wustl.wustl.edu
Library was constructed by Marcus Frohme and Uri Frank Library
materials provided by Marcus Frohme, German Cancer Research
Center (DKFZ) Heidelberg, Uri Frank, University of Heidelberg
Library re-arrayed by Jorge Sozaried (DKFZ) DNA sequencing by:
Washington University Genome Sequencing Center For information on
obtaining a clone please contact: Hans Bode (hrobode@uci.edu)
Seq primer: -40RP from Gibco
High quality sequence stop: 148.
FEATURES
source
Location/Qualifiers
1..148
/organism="Hydractinia echinata"
/mol_type="mRNA"
/db_xref="taxon:35630"
/lab_host="DH10B"
/clone_lib="HyEch JUMY T1"
/note="Vector: pSPORT1; Site 1: Not I; Site 2: Sal I; A
pool of mRNA was primed with an anchored oligo-dT adaptor
with a Not I site for 1st strand synthesis. Double
stranded cDNA was ligated to Sal-Adaptors and cut with
NotI. After size selection (without radioactivity) cDNA
was ligated into pSport with SalI/NotI termini.
Transformation was in DH10B Electromax T1 phage resistant
cells. Plating was on 2YT/Carbenicillin Agar and 14x384
cells were blue/white selected automatically picked into
2YT/HMFV/Carbenicillin (HMFV is a freezing additive)."
```

```

ACCESSION C0720290
VERSION C0720290.1 GI:50697178
KEYWORDS EST.
SOURCE Hydractinia echinata
ORGANISM Hydractinia echinata
Eukaryota; Metazoa; Cnidaria; Hydrozoa; Hydrozoa; Anthomedusae;
Hydractiniidae; Hydractinia.
REFERENCE 1 (bases 1 to 148)
AUTHORS Bode,H., Blumberg,B., Steele,R., Wigge,P., Gee,L., Nguyen,Q.,
Martinez,D., Kibler,D., Hampson,S., Clifton,S., Pape,D., Marra,M.,
Hillier,L., Martin,J., Wylie,T., Dante,M., Theising,B., Bowers,Y.,
Gibbons,M., Ritter,E., Bennett,J., Ronko,I., Tsagareishvili,R.,
Meguire,L., Kennedy,S., Waterston,R. and Wilson,R.
WashU Hydra EST Project
Contact: Hans Bode
WashU Hydra EST Project
Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108, USA
Tel: 314 286 1800
Fax: 314 286 1810
Email: est@wustl.wustl.edu
Library was constructed by Marcus Frohme and Uri Frank Library
materials provided by Marcus Frohme, German Cancer Research
Center (DKFZ) Heidelberg, Uri Frank, University of Heidelberg
Library re-arrayed by Jorge Sozaried (DKFZ) DNA sequencing by:
Washington University Genome Sequencing Center For information on
obtaining a clone please contact: Hans Bode (hrobode@uci.edu)
Seq primer: -40RP from Gibco
High quality sequence stop: 148.
FEATURES
source
Location/Qualifiers
1..148
/organism="Hydractinia echinata"
/mol_type="mRNA"
/db_xref="taxon:35630"
/lab_host="DH10B"
/clone_lib="HyEch JUMY T1"
/note="Vector: pSPORT1; Site 1: Not I; Site 2: Sal I; A
pool of mRNA was primed with an anchored oligo-dT adaptor
with a Not I site for 1st strand synthesis. Double
stranded cDNA was ligated to Sal-Adaptors and cut with
NotI. After size selection (without radioactivity) cDNA
was ligated into pSport with SalI/NotI termini.
Transformation was in DH10B Electromax T1 phage resistant
cells. Plating was on 2YT/Carbenicillin Agar and 14x384
cells were blue/white selected automatically picked into
2YT/HMFV/Carbenicillin (HMFV is a freezing additive)."
```

ORIGIN

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Query Match      100.0%; Score 10; DB 7; Length 148;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
    |||||
Db 42 CGAACGTTTCG 51
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RESULT 42

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C0720290/c
LOCUS
DEFINITION tai4lh07.y1 HyEch JUMY T1 Hydractinia echinata cDNA 5', mRNA
sequence.
ACCESSION C0720290
VERSION C0720290.1 GI:50697178
KEYWORDS EST.
SOURCE Hydractinia echinata
Eukaryota; Metazoa; Cnidaria; Hydrozoa; Hydrozoa; Anthomedusae;
Hydractiniidae; Hydractinia.
REFERENCE 1 (bases 1 to 148)
AUTHORS Bode,H., Blumberg,B., Steele,R., Wigge,P., Gee,L., Nguyen,Q.,
Martinez,D., Kibler,D., Hampson,S., Clifton,S., Pape,D., Marra,M.,
```

Hallier,L., Martin,J., Wylie,T., Dante,M., Theising,B., Bowers,Y., Gibbons,M., Ritter,E., Bennett,J., Ronko,I., Tsagareishvili,R., Maguire,L., Kennedy,S., Waterston,R. and Wilson,R.
WashU Hydra EST Project
Unpublished (2002)

TITLE JOURNAL COMMENT

Contact: Hans Bode
WashU Hydra EST Project
Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108, USA
Tel: 314 286 1800
Fax: 314 286 1810
Email: est@watson.wustl.edu

Library was constructed by Marcus Frohme and Uri Frank Library
materials provided by Marcus Frohme, German Cancer Research
Center (DKFZ) Heidelberg, Uri Frank, University of Heidelberg
Library re-arrayed by Jorge Sozaried (DKFZ) DNA sequencing by:
Washington University Genome Sequencing Center For information on
obtaining a clone please contact: Hans Bode (hrobode@uci.edu)
Seq primer: -40Rp from Gibco
High quality sequence stop: 148.

FEATURES source

Location/Qualifiers
1..148
/organism="Hydractinia echinata"
/mol_type="mRNA"
/db_xref="taxon:35630"
/lab_host="DH10B"
/clone_lib="HyEch JUMY T1"

/note="vector: pSPOR1; Site_1: Not I; Site_2: Sal I; A
pool of mRNA was primed with an anchored oligo-dT adaptor
with a Not I site for 1st strand synthesis. Double
stranded cDNA was ligated to Sal-Adaptors and cut with
NotI. After size selection (without radioactivity) cDNA
was ligated into pSPort with SalI/NotI termini.
Transformation was in DH10B Electromax TI phage resistant
cells. Plating was on 2YT/Carbenicillin Agar and 14x384
cells were blue/white selected automatically picked into
2YT/HMPM/Carbenicillin (HMPM is a freezing additive)."

ORIGIN

Query Match 100.0%; Score 10; DB 7; Length 148;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
|||||
Db 51 CGAACGTTTCG 42

RESULT 43

BH392000 150 bp DNA linear GSS 11-DEC-2001
LOCUS AG-ND-143H5.TF ND-TAM Anopheles gambiae genomic clone AG-ND-143H5,
DEFINITION genomic survey sequence.

ACCESSION BH392000
VERSION BH392000.1 GI:17338141

KEYWORDS GSS.
SOURCE Anopheles gambiae (African malaria mosquito)

ORGANISM Anopheles gambiae

Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Nematocera; Culicoidea;
Anopheles.

1 (bases 1 to 150)

Hong,Y.S., Hogan,J.R., Wang,X., Sarkar,A., Sim,C., Loftus,B.J.,
Ren,C., Huff,E.R., Carlile,J.L., Black,K., Zhang,H.-B.,
Gardner,M.J. and Collins,F.H.
Construction of a BAC library and generation of BAC end

sequence-tagged connectors for genome sequencing of the African
malaria mosquito Anopheles gambiae
Mol. Genet. Genomics 268 (6), 720-728 (2003)

22542063
PUBMED 12655398

COMMENT Contact: Brendan J Loftus
Department of Eukaryotic Genomics

The Institute for Genomic Research
9712 Medical Center Dr., Rockville, MD 20850, USA
Tel: 301 838 0208
Fax: 301 838 3543
Email: bjloftus@tigr.org

This clone is from an A. gambiae BAC library (ND-TAM) provided by
F.H. Collins and sequenced by The Institute for Genomic Research
(TIGR). The BAC library was generated from A. gambiae PEST strain
DNA. All DNA was extracted from newly hatched first instar larvae
to minimize the inclusion of DNA from microorganisms that inhabit
the gut. The DNA is derived from mixed sexes of larvae. The BAC
library was constructed at Texas A&M University BAC Center
University, College Station, Texas 77843-2123, USA using a HindIII
partial digest.

Seq primer: M13 For

Class: BAC ends.

Location/Qualifiers
1..150
/organism="Anopheles gambiae"
/mol_type="genomic DNA"
/strain="PEST"
/db_xref="taxon:7165"
/clone="AG-ND-143H5"
/clone_lib="ND-TAM"
/note="Vector: pECBAC1; Site_1: HindIII"

ORIGIN

Query Match 100.0%; Score 10; DB 8; Length 150;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
|||||
Db 88 CGAACGTTTCG 97

RESULT 44

BH392000/c 150 bp DNA linear GSS 11-DEC-2001
LOCUS AG-ND-143H5.TF ND-TAM Anopheles gambiae genomic clone AG-ND-143H5,
DEFINITION genomic survey sequence.

ACCESSION BH392000
VERSION BH392000.1 GI:17338141

KEYWORDS GSS.
SOURCE Anopheles gambiae (African malaria mosquito)

Anopheles gambiae
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Nematocera; Culicoidea;
Anopheles.

1 (bases 1 to 150)

Hong,Y.S., Hogan,J.R., Wang,X., Sarkar,A., Sim,C., Loftus,B.J.,
Ren,C., Huff,E.R., Carlile,J.L., Black,K., Zhang,H.-B.,
Gardner,M.J. and Collins,F.H.
Construction of a BAC library and generation of BAC end

sequence-tagged connectors for genome sequencing of the African
malaria mosquito Anopheles gambiae
Mol. Genet. Genomics 268 (6), 720-728 (2003)

22542063
PUBMED 12655398

COMMENT Contact: Brendan J Loftus
Department of Eukaryotic Genomics
The Institute for Genomic Research
9712 Medical Center Dr., Rockville, MD 20850, USA
Tel: 301 838 0208
Fax: 301 838 3543
Email: bjloftus@tigr.org

This clone is from an A. gambiae BAC library (ND-TAM) provided by
F.H. Collins and sequenced by The Institute for Genomic Research
(TIGR). The BAC library was generated from A. gambiae PEST strain
DNA. All DNA was extracted from newly hatched first instar larvae
to minimize the inclusion of DNA from microorganisms that inhabit
the gut. The DNA is derived from mixed sexes of larvae. The BAC
library was constructed at Texas A&M University BAC Center

University, College Station, Texas 77843-2123, USA using a HindIII partial digest.
Seq primer: M13 For
Class: BAC ends.

FEATURES

Location/Qualifiers
1..150
/organism="Anopheles gambiae"
/mol_type="genomic DNA"
/strain="PEST"
/db_xref="taxon:7165"
/clone="AG-ND-143H5"
/clone_lib="ND-TAM"
/note="Vector: pECBAC1; Site_1: HindIII"

ORIGIN

Query Match 100.0%; Score 10; DB 8; Length 150;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
Db 97 CGAACGTTTCG 88

RESULT 45
BF883579
LOCUS 152 bp mRNA linear EST 17-JAN-2001
DEFINITION QV1-ET0180-111200-563-c01 ET0180 Homo sapiens cDNA, mRNA sequence.
ACCESSION BF883579
VERSION BF883579.1 GI:12273705
KEYWORDS EST.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1 (bases 1 to 152)
AUTHORS Dias Neto,E., Garcia Correa,R., Verjovski-Almeida,S., Briones,M.R., Nagai,M.A., da Silva,W. Jr., Zago,M.A., Bordin,S., Costa,F.F., Goldman,G.H., Carvalho,A.P., Matsukuma,A., Baia,G.S., Simpson,D.H., Brunstein,A., deOliveira,P.S., Bucher,P., Jongeneel,C.V., O'Hare,M.J., Soares,F., Brentani,R.R., Reis,L.F., de Souza,S.J. and Simpson,A.J.
Shotgun sequencing of the human transcriptome with ORF expressed sequence tags
Proc. Natl. Acad. Sci. U.S.A. 97 (7), 3491-3496 (2000)
20202663
MEDLINE 10737800
COMMENT Contact: Simpson A.J.G.
Laboratory of Cancer Genetics
Ludwig Institute for Cancer Research
Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP, Brazil
Tel: +55-11-2704922
Fax: +55-11-2707001
Email: asimpson@ludwig.org.br
This sequence was derived from the FAPESP/LICR Human Cancer Genome Project. This entry can be seen in the following URL
(http://www.ludwig.org.br/scripts/gethtml2.pl?tl=QV1&t2=QV1-ET0180-111200-563-c01&t3=2000-12-11&t4=1)
Seq primer: puc 18 forward
High quality sequence start: 6
High quality sequence stop: 152.

FEATURES

Location/Qualifiers
1..152
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/dev_stage="Adult"
/clone_lib="ET0180"
/note="Organ: lung_tumor; Vector: puc18; Site_1: SmaI; Site_2: SmaI; A mini-library was made by cloning products derived from ORESTES PCR (U.S. Letters Patent application No. 196,716 - Ludwig Institute for Cancer Research)

profiles into the pUC 18 vector. Reverse transcription of tissue mRNA and cDNA amplification were performed under low stringency conditions."

ORIGIN

Query Match 100.0%; Score 10; DB 2; Length 152;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
Db 65 CGAACGTTTCG 74

RESULT 46

BF883579/c
LOCUS 152 bp mRNA linear EST 17-JAN-2001
DEFINITION QV1-ET0180-111200-563-c01 ET0180 Homo sapiens cDNA, mRNA sequence.
ACCESSION BF883579
VERSION BF883579.1 GI:12273705
KEYWORDS EST.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1 (bases 1 to 152)
AUTHORS Dias Neto,E., Garcia Correa,R., Verjovski-Almeida,S., Briones,M.R., Nagai,M.A., da Silva,W. Jr., Zago,M.A., Bordin,S., Costa,F.F., Goldman,G.H., Carvalho,A.P., Matsukuma,A., Baia,G.S., Simpson,D.H., Brunstein,A., deOliveira,P.S., Bucher,P., Jongeneel,C.V., O'Hare,M.J., Soares,F., Brentani,R.R., Reis,L.F., de Souza,S.J. and Simpson,A.J.
Shotgun sequencing of the human transcriptome with ORF expressed sequence tags
Proc. Natl. Acad. Sci. U.S.A. 97 (7), 3491-3496 (2000)
20202663
MEDLINE 10737800
COMMENT Contact: Simpson A.J.G.
Laboratory of Cancer Genetics
Ludwig Institute for Cancer Research
Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP, Brazil
Tel: +55-11-2704922
Fax: +55-11-2707001
Email: asimpson@ludwig.org.br
This sequence was derived from the FAPESP/LICR Human Cancer Genome Project. This entry can be seen in the following URL
(http://www.ludwig.org.br/scripts/gethtml2.pl?tl=QV1&t2=QV1-ET0180-111200-563-c01&t3=2000-12-11&t4=1)
Seq primer: puc 18 forward
High quality sequence start: 6
High quality sequence stop: 152.

FEATURES

Location/Qualifiers
1..152
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/dev_stage="Adult"
/clone_lib="ET0180"
/note="Organ: lung_tumor; Vector: puc18; Site_1: SmaI; Site_2: SmaI; A mini-library was made by cloning products derived from ORESTES PCR (U.S. Letters Patent application No. 196,716 - Ludwig Institute for Cancer Research)
profiles into the pUC 18 vector. Reverse transcription of tissue mRNA and cDNA amplification were performed under low stringency conditions."

ORIGIN

Query Match 100.0%; Score 10; DB 2; Length 152;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10


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ORIGIN
Query Match      100.0%; Score 10; DB 7; Length 155;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 21 CGAACGTTTCG 30

RESULT 50
CV021475/c
LOCUS
DEFINITION tbt_009281 Normalized Nicotiana tabacum cDNA library Nicotiana
ACCESSION CV021475
VERSION CV021475.1 GI:51462983
KEYWORDS EST.
SOURCE Nicotiana tabacum (common tobacco)
ORGANISM Nicotiana tabacum
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; Core eudicots;
asterids; lamids; Solanales; Solanaceae; Nicotiana.
REFERENCE 1 (bases 1 to 155)
AUTHORS Li, W.Z., Shao, Y., Li, Y.P., Lu, X.P., Montero, D.C., Alvarez, S.P.,
Deng, Y., Jin, Q.C., Wang, S., Dai, C.E., Zeng, Z.L., Wang, Y.Q.,
Dong, H.T. and Li, D.B.
TITLE Large-scale identification of ESTs from Nicotiana tabacum by
normalized cDNA library sequencing
JOURNAL Unpublished (2004)
COMMENT Contact: Wenzheng Li, Yan Shao, Yongping Li, Xiuping Lu, Limin
Song, Haitao Dong, Debao Li
The Tobacco Science Research Institute of Yunnan Province; Yunnan
Provincial Tobacco Group Dali Branch; Bioinformatics and Gene
Network Research Group, Zhejiang University
The Tobacco Science Research Institute of Yunnan Province, Yuxi
653100, China
Email: webmaster@estarray.org, URL: http://www.estarray.org
Seq primer: M13.
Only the high quality region of sequence was submitted.

FEATURES
source
Location/Qualifiers
1..155
/organism="Nicotiana tabacum"
/mol_type="mRNA"
/db_xref="taxon:4097"
/clone="tbt_009281"
/tissue_type="Mixed"
/notes="Vector: pBS-SK+"

ORIGIN
Query Match      100.0%; Score 10; DB 7; Length 155;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 30 CGAACGTTTCG 21

RESULT 51
BH226212
LOCUS
DEFINITION 1006130G06.y1 1006 - RescueMu Grid G Zea mays genomic, genomic
survey sequence.
ACCESSION BH226212
VERSION BH226212.1 GI:16824960
KEYWORDS GSS.
SOURCE Zea mays
ORGANISM Zea mays
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD
clade; Panicoideae; Andropogoneae; Zea.
REFERENCE 1 (bases 1 to 155)
AUTHORS Walbot, V.
TITLE Maize genomic sequences found using engineered RescueMu transposon
JOURNAL Unpublished (2001)
COMMENT Contact: Walbot V
Department of Biological Sciences
Stanford University
855 California Ave, Palo Alto, CA 94304, USA
Tel: 650 723 2227
Fax: 650 725 8221

```

```

REFERENCE
AUTHORS Walbot, V.
TITLE Maize genomic sequences found using engineered RescueMu transposon
JOURNAL Unpublished (2001)
COMMENT Contact: Walbot V
Department of Biological Sciences
Stanford University
855 California Ave, Palo Alto, CA 94304, USA
Tel: 650 723 2227
Fax: 650 725 8221
Email: walbot@stanford.edu
Possible ligation site so sequence was trimmed. Post-ligation
sequence submitted separately.
Plate: 1006130 row: 11
Class: transposon-tagged.
FEATURES
source
Location/Qualifiers
1..155
/organism="Zea mays"
/mol_type="genomic DNA"
/cultivar="mixed background W23/A188/B73"
/db_xref="taxon:4577"
/tissue_type="leaf"
/dev_stage="adult"
/lab_host="DH10B"
/clone_lib="1006 - RescueMu Grid G"
/notes="Organ: leaf; Vector: RescueMu (engineered from
pBluescript backbone); Site 1: BamHI; Site 2: BglII;
RescueMu is a 4.9 kb, modified maize Mu transposon
designed to allow plasmid rescue from total genomic DNA.
Mu elements insert preferentially into transcription
units. For more information on RescueMu, go to the web
site 'www.zmdb.iastate.edu' and follow the links for
'RescueMu.' Grid G was grown at Stanford in 2000. DNA was
extracted from leaf punches, double digested using BamHI
and BglII, and ligated to form circular plasmids. DH10B
cells were transformed and then screened on LB plates with
ampicillin."

ORIGIN
Query Match      100.0%; Score 10; DB 8; Length 155;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 21 CGAACGTTTCG 30

RESULT 52
BH226212/c
LOCUS
DEFINITION 1006130G06.y1 1006 - RescueMu Grid G Zea mays genomic, genomic
survey sequence.
ACCESSION BH226212
VERSION BH226212.1 GI:16824960
KEYWORDS GSS.
SOURCE Zea mays
ORGANISM Zea mays
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD
clade; Panicoideae; Andropogoneae; Zea.
REFERENCE 1 (bases 1 to 155)
AUTHORS Walbot, V.
TITLE Maize genomic sequences found using engineered RescueMu transposon
JOURNAL Unpublished (2001)
COMMENT Contact: Walbot V
Department of Biological Sciences
Stanford University
855 California Ave, Palo Alto, CA 94304, USA
Tel: 650 723 2227
Fax: 650 725 8221

```

Email: walbot@stanford.edu
 Possible ligation site so sequence was trimmed. Post-ligation
 sequence submitted separately.
 Plate: 1006130 row: 11
 Class: transposon-tagged.

FEATURES

```

source
1. .157
/organism="Zea mays"
/mol_type="genomic DNA"
/cultivar="mixed background W23/Al88/B73"
/db_xref="taxon:4577"
/tissue_type="leaf"
/dev_stage="adult"
/lab_host="DH10B"
/clone_lib="1006 - RescueMu Grid G"
/notes="Organ: leaf; Vector: RescueMu (engineered from
pBluescript backbone); Site_1: BamHI; Site_2: BglII;
RescueMu is a 4.9 kb, modified maize Mu transposon
designed to allow plasmid rescue from total genomic DNA.
Mu elements insert preferentially into transcription
units. For more information on RescueMu, go to the web
site 'www.zmdb.tastate.edu' and follow the links for
'RescueMu.' Grid G was grown at Stanford in 2000. DNA was
extracted from leaf punches, double digested using BamHI
and BglII, and ligated to form circular plasmids. DH10B
cells were transformed and then screened on LB plates with
ampicillin."

```

ORIGIN

```

Query Match      100.0%; Score 10; DB 8; Length 155;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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```

Qy 1 CGAACGTTTCG 10
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Db 30 CGAACGTTTCG 21

```

RESULT 53

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BP539423
LOCUS      157 bp mRNA linear EST 29-JUL-2004
DEFINITION Beebrain-p5E3_E03_09.seq, mRNA sequence.
ACCESSION BP539423
VERSION BP539423.1 GI:42537560
KEYWORDS EST.
SOURCE Apis mellifera (honey bee)
ORGANISM Apis mellifera
          Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
          Neoptera; Endopterygota; Hymenoptera; Apocrita; Apoidea; Apoidea;
          Apidae; Apis.

```

REFERENCE

```

AUTHORS Takeuchi,H., Fujiyuki,T., Shirai,K., Matsuo,Y., Kamikouchi,A.,
        Fujinawa,Y., Kato,A., Tsujimoto,A. and Kubo,T.
TITLE Identification of genes expressed preferentially in the honeybee
        mushroom bodies by combination of differential display and cDNA

```

```

JOURNAL microarray
MEDLINE FEBS Lett. 513 (2-3), 230-234 (2002)
PUBMED 21901088

```

COMMENT

```

Contact: Hideaki Takeuchi
University of Tokyo
Hongo 7-3-1, Bunkyo-ku, Tokyo 113-0003, Japan
Tel: 81-3-5841-4448
Fax: 81-3-5841-4448
Email: takeuchi@biol.s.u-tokyo.ac.jp
These clones were obtained
using Differential Display method.
Location/Qualifiers
1. .157
/organism="Apis mellifera"
/mol_type="mRNA"
/db_xref="taxon:7460"

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FEATURES

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source
1. .157
/organism="Apis mellifera"
/mol_type="mRNA"
/db_xref="taxon:7460"

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ORIGIN

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Query Match      100.0%; Score 10; DB 5; Length 157;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy 1 CGAACGTTTCG 10
    |||||
Db 48 CGAACGTTTCG 57

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RESULT 54

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BP539423/c
LOCUS      157 bp mRNA linear EST 29-JUL-2004
DEFINITION Beebrain-p5E3_E03_09.seq, mRNA sequence.
ACCESSION BP539423
VERSION BP539423.1 GI:42537560
KEYWORDS EST.
SOURCE Apis mellifera (honey bee)
ORGANISM Apis mellifera
          Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
          Neoptera; Endopterygota; Hymenoptera; Apocrita; Aculeata; Apoidea;
          Apidae; Apis.

```

REFERENCE

```

AUTHORS Takeuchi,H., Fujiyuki,T., Shirai,K., Matsuo,Y., Kamikouchi,A.,
        Fujinawa,Y., Kato,A., Tsujimoto,A. and Kubo,T.
TITLE Identification of genes expressed preferentially in the honeybee
        mushroom bodies by combination of differential display and cDNA

```

```

JOURNAL microarray
MEDLINE FEBS Lett. 513 (2-3), 230-234 (2002)
PUBMED 21901088

```

COMMENT

```

Contact: Hideaki Takeuchi
University of Tokyo
Hongo 7-3-1, Bunkyo-ku, Tokyo 113-0003, Japan
Tel: 81-3-5841-4448
Fax: 81-3-5841-4448
Email: takeuchi@biol.s.u-tokyo.ac.jp
These clones were obtained
using Differential Display method.
Location/Qualifiers
1. .157
/organism="Apis mellifera"
/mol_type="mRNA"
/db_xref="taxon:7460"
/clone="Beebrain-p5E3_E03_09.seq"
/tissue_type="brain"
/dev_stage="adult"
/clone_lib="Apis mellifera brain adult"

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FEATURES

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source
1. .157
/organism="Apis mellifera"
/mol_type="mRNA"
/db_xref="taxon:7460"
/clone="Beebrain-p5E3_E03_09.seq"
/tissue_type="brain"
/dev_stage="adult"
/clone_lib="Apis mellifera brain adult"

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ORIGIN

```

Query Match      100.0%; Score 10; DB 5; Length 157;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy 1 CGAACGTTTCG 10
    |||||
Db 57 CGAACGTTTCG 48

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RESULT 55

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AA483257
LOCUS      159 bp mRNA linear EST 18-AUG-1997
DEFINITION nf03g01.s1 NCI_CGAP_L11 Homo sapiens cDNA clone IMAGE:912720, mRNA
        sequence.
ACCESSION AA483257
VERSION AA483257.1 GI:2212070
KEYWORDS EST.

```

```

SOURCE      Homo sapiens (human)
ORGANISM    Homo sapiens
REFERENCE   1 (bases 1 to 159)
AUTHORS    NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
TITLE      National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
JOURNAL    Tumor Gene Index
COMMENT     Unpublished (1997)
            Contact: Robert Strausberg, Ph.D.
            Email: cgapbs-remail.nih.gov
            Tissue Procurement: David E. Kleiner, M.D., Ph.D., Rodrigo F.
            Chuqui, M.D., Michael R. Emmert-Buck, M.D., Ph.D.
            cDNA Library Preparation: David B. Krizman, Ph.D.
            DNA Sequencing by: Washington University Genome Sequencing Center
            Clone distribution: NCI-CGAP clone distribution information can be
            found through the I.M.A.G.E. Consortium/LLNL at:
            www-bio.llnl.gov/bbrp/image/image.html
Insert Length: 283 Std Error: 0.00
Seq primer: -41m13 fwd. ET from Amersham.
FEATURES   Location/Qualifiers
            1..159
            /organism="Homo sapiens"
            /mol_type="mRNA"
            /db_xref="taxon:9606"
            /clone="IMAGE:912720"
            /tissue_type="liver"
            /lab_host="DH10B"
            /clone_lib="NCI_CGAP_L11"
            /note="Vector: pAMP10; mRNA made from normal liver
            hepatocytes, cDNA made by oligo-dr priming.
            Non-directionally cloned. Size-selected on agarose gel,
            average insert size 600 bp. Reference: Krizman et al.
            (1996) Cancer Research 56:5380-5383."
ORIGIN
Query Match      100.0%; Score 10; DB 1; Length 159;
Best Local Similarity 100.0%; Pred. No. 1.le+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGACGTTTCG 10
Db 129 CGACGTTTCG 120

RESULT 57
LOCUS      BM277474
DEFINITION Trichuris muris cDNA clone Tm ad 40F07 5', mRNA sequence.
ACCESSION  BM277474
VERSION     BM277474.1 GI:17970713
KEYWORDS   EST.
SOURCE     Trichuris muris
ORGANISM   Eukaryota; Metazoa; Nematoda; Enoplea; Trichocephalida;
            Trichuridae; Trichuris.
REFERENCE  1 (bases 1 to 160)
AUTHORS    Blaxter, M.L., Parkinson, J., Whitton, C., Daub, J., Guilianio, D.,
            Hall, N., Quayle, M. and Barrell, B.
            Edinburgh University/Sanger Centre Nematode EST Project
            Unpublished (2000)
TITLE      Contact: Blaxter ML
JOURNAL    Institute of Cell, Animal and Population Biology
            University of Edinburgh
            Ashworth Labs, King's Buildings, West Mains Road, Edinburgh, EH9
            3JT, UK.
            Tel: +44 131 650 6760
            Fax: +44 131 670 5450
            Email: mark.blaxter@ed.ac.uk
            The library was prepared by Richard Grencis, Manchester University,
            Manchester. Sequencing was performed by the Pathogen Sequencing
            Unit, Sanger Centre, Cambridge, UK (Neil Hall, Mike Quail & Bart
            Barrell).
            PCR Primers
            FORWARD: T3
            BACKWARD: T7PL
            Plate: 40 row: F column: 07
            Seq primer: SKPL
            High quality sequence stop: 160.
FEATURES   Location/Qualifiers
            1..160
            /organism="Trichuris muris"
            /mol_type="mRNA"
            /db_xref="taxon:70415"
            /clone="Tm ad 40F07"
            /sex="mixed"
            /dev_stage="adult"
            /clone_lib="Trichuris muris (parasitic nematode) mixed
            adult"
            /note="Vector: Lambda Zap II; Site_1: EcoRI (5'end);

SOURCE      Homo sapiens (human)
ORGANISM    Homo sapiens
REFERENCE   1 (bases 1 to 159)
AUTHORS    NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
TITLE      National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
JOURNAL    Tumor Gene Index
COMMENT     Unpublished (1997)
            Contact: Robert Strausberg, Ph.D.
            Email: cgapbs-remail.nih.gov
            Tissue Procurement: David E. Kleiner, M.D., Ph.D., Rodrigo F.
            Chuqui, M.D., Michael R. Emmert-Buck, M.D., Ph.D.
            cDNA Library Preparation: David B. Krizman, Ph.D.
            DNA Sequencing by: Washington University Genome Sequencing Center
            Clone distribution: NCI-CGAP clone distribution information can be
            found through the I.M.A.G.E. Consortium/LLNL at:
            www-bio.llnl.gov/bbrp/image/image.html
Insert Length: 283 Std Error: 0.00
Seq primer: -41m13 fwd. ET from Amersham.
FEATURES   Location/Qualifiers
            1..159
            /organism="Homo sapiens"
            /mol_type="mRNA"
            /db_xref="taxon:9606"
            /clone="IMAGE:912720"
            /tissue_type="liver"
            /lab_host="DH10B"
            /clone_lib="NCI_CGAP_L11"
            /note="Vector: pAMP10; mRNA made from normal liver
            hepatocytes, cDNA made by oligo-dr priming.
            Non-directionally cloned. Size-selected on agarose gel,
            average insert size 600 bp. Reference: Krizman et al.
            (1996) Cancer Research 56:5380-5383."
ORIGIN
Query Match      100.0%; Score 10; DB 1; Length 159;
Best Local Similarity 100.0%; Pred. No. 1.le+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGACGTTTCG 10
Db 120 CGACGTTTCG 129

RESULT 56
LOCUS      AA483257/c
DEFINITION nF03g01.61 NCI_CGAP_L11 Homo sapiens cDNA clone IMAGE:912720, mRNA
sequence.
ACCESSION  AA483257
VERSION     AA483257.1 GI:2212070
KEYWORDS   EST.
SOURCE     Homo sapiens (human)
ORGANISM   Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE  1 (bases 1 to 159)
AUTHORS    NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
            National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
JOURNAL    Tumor Gene Index
COMMENT     Unpublished (1997)
            Contact: Robert Strausberg, Ph.D.
            Email: cgapbs-remail.nih.gov
            Tissue Procurement: David E. Kleiner, M.D., Ph.D., Rodrigo F.
            Chuqui, M.D., Michael R. Emmert-Buck, M.D., Ph.D.
            cDNA Library Preparation: David B. Krizman, Ph.D.
            DNA Sequencing by: Washington University Genome Sequencing Center
            Clone distribution: NCI-CGAP clone distribution information can be
            found through the I.M.A.G.E. Consortium/LLNL at:
            www-bio.llnl.gov/bbrp/image/image.html

```

Site 2: XhoI (3'end); Trichuris muris is a nematode parasite of rodents related to the human whipworm Trichuris trichiura. The library was constructed from Trichuris muris adults (Edinburgh 'E' strain) maintained in mice, and was provided by Dr. Richard Grensis, University of Manchester."

ORIGIN

Query Match 100.0%; Score 10; DB 4; Length 160;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
| | | | | | | | | |
Db 81 CGAACGTTTCG 90

RESULT 58

BM277474/c
LOCUS 160 bp mRNA linear EST 20-DEC-2001
DEFINITION Trm ad 40F07_SKPL Trichuris muris (parasitic nematode) mixed adult
ACCESSION BM277474
VERSION BM277474.1 GI:17970713
KEYWORDS EST.
SOURCE Trichuris muris
ORGANISM Trichuris muris
Eukaryota; Metazoa; Nematoda; Enoplea; Trichocephalida;
Trichuridae; Trichuris.

REFERENCE

1 (bases 1 to 160)
Blaxter, M.L., Parkinson, J., Whitton, C., Daub, J., Guiliano, D., Hall, N., Quayle, M. and Barrell, B.
Edinburgh University/Sanger Centre Nematode EST Project
Unpublished (2000)
Contact: Blaxter ML
Institute of Cell, Animal and Population Biology
University of Edinburgh
Ashworth Labs, King's Buildings, West Mains Road, Edinburgh, EH9 3JF, UK.
Tel: +44 131 650 6760
Fax: +44 131 670 5450
Email: mark.blaxter@ed.ac.uk

AUTHORS

The library was prepared by Richard Grensis, Manchester University,
Manchester. Sequencing was performed by the Pathogen Sequencing
Unit, Sanger Centre, Cambridge, UK (Neil Hall, Mike Quail & Bart
Barrell).

TITLE

PCR Primers

JOURNAL

COMMENT

BACKWARD: T7PL
FORWARD: T3
Plate: 40 row: F column: 07
Seq primer: SKPL
High quality sequence stop: 160.
Location/Qualifiers
1. .160
/organism="Trichuris muris"
/mol_type="mRNA"
/db_xref="taxon:70415"
/clones="Tm ad 40F07"
/sex="mixed"
/dev_stage="adult"
/clone_lib="Trichuris muris (parasitic nematode) mixed
adult"
/note="Vector: Lambda Zap II; Site_1: EcoRI (5'end);
Site_2: XhoI (3'end); Trichuris muris is a nematode
parasite of rodents related to the human whipworm
Trichuris trichiura. The library was constructed from
Trichuris muris adults (Edinburgh 'E' strain) maintained
in mice, and was provided by Dr. Richard Grensis,
University of Manchester."

ORIGIN

Query Match 100.0%; Score 10; DB 4; Length 160;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
| | | | | | | | | |
Db 90 CGAACGTTTCG 81

RESULT 59

BE100895
LOCUS 166 bp mRNA linear EST 13-JUN-2000
DEFINITION UI-R-BJ1-atx-f-12-0-UI.s1 UI-R-BJ1 Rattus norvegicus cDNA clone
UI-R-BJ1-atx-f-12-0-UI 3', mRNA sequence.

ACCESSION BE100895
VERSION BE100895.1 GI:8492796
KEYWORDS EST.
SOURCE Rattus norvegicus (Norway rat)
ORGANISM Rattus norvegicus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
Rattus.

REFERENCE

1 (bases 1 to 166)
Bonaldo, M.F., Lennon, G. and Soares, M.B.
Normalization and subtraction: two approaches to facilitate gene
discovery
Genome Res. 6 (9), 791-806 (1996)

JOURNAL

MEDLINE

PubMed

COMMENT

Contact: Soares, MB
Coordinated Laboratory for Computational Genomics
University of Iowa
375 Newton Road, 4156 MEBRF, Iowa City, IA 52242, USA
Tel: 319 335 8250
Fax: 319 335 9565
Email: Bento-soares@uiowa.edu

Oligo-dT track not found, Not 1 site shown in beginning of sequence
is likely internal to the message. cDNA Library Preparation: M.B.
Soares Lab Clone distribution: Clones will be available through
Research Genetics (www.resgen.com)
Seq primer: M13 Forward
POLYA=No.

FEATURES

source

Location/Qualifiers
1. .166
/organism="Rattus norvegicus"
/mol_type="mRNA"
/strain="Sprague-Dawley"
/db_xref="taxon:10116"
/clone="UI-R-BJ1-atx-f-12-0-UI"
/lab_host="DH10B (Life Technologies)"
/clone_lib="UI-R-BJ1"
/note="Vector: pT73D-Pac (Pharmacia) with a modified
polylinker; Site_1: Not I; Site_2: Eco RI; The UI-R-BJ1
library is a subtracted library derived from the following
tissues: atrium at 16.5 dpc, ventricle at 16.5 dpc, AV
canal at 16.5 dpc, atrium at 15 dpc, ventricle at 15 dpc,
AV canal at 15 dpc, ventricle at 13 dpc, and adult heart.
For a detailed description of the library from which this
clone was derived, please visit our web site at
rategest.eng.uiowa.edu. The subtraction has been previously
described in (Bonaldo, Lennon and Soares, Genome Research
6:791-806, 1996)
TAG_SEQ=None found"

ORIGIN

Query Match 100.0%; Score 10; DB 2; Length 166;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
| | | | | | | | | |
Db 97 CGAACGTTTCG 106

RESULT 60

BE100895/c
 LOCUS BE100895 166 bp mRNA linear. EST 13-JUN-2000
 DEFINITION UI-R-BJ1-atx-f-12-0-UI_s1 UI-R-BJ1 Rattus norvegicus cDNA clone
 UI-R-BJ1-atx-f-12-0-UI 3', mRNA sequence.
 ACCESSION BE100895
 VERSION BE100895
 KEYWORDS EST.
 SOURCE BE100895.1 GI:8492796
 ORGANISM Rattus norvegicus (Norway rat)
 Rattus norvegicus
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
 Rattus.
 REFERENCE 1 (bases 1 to 166)
 AUTHORS Bonaldo,M.F., Lennon,G. and Soares,M.B.
 TITLE Normalization and subtraction: two approaches to facilitate gene
 discovery
 JOURNAL Genome Res. 6 (9), 791-806 (1996)
 MEDLINE 97044477
 PUBMED 889548
 COMMENT Contact: Soares, MB
 Coordinated Laboratory for Computational Genomics
 University of Iowa
 375 Newton Road, 4156 MEBRF, Iowa City, IA 52242, USA
 Tel: 319 335 8250
 Fax: 319 335 9585
 Email: bento-soares@uiowa.edu
 Oligo-dt track not found, Not 1 site shown in beginning of sequence
 is likely internal to the message. cDNA Library Preparation: M.B.
 Soares Lab Clone distribution: clones will be available through
 Research Genetics (www.resgen.com)
 Seq primer: M13 Forward
 POUYA=No.

FEATURES
 source
 1..166 Location/Qualifiers
 /organism="Rattus norvegicus"
 /mol_type="mRNA"
 /strain="Sprague-Dawley"
 /db_xref="taxon:10116"
 /clone="UI-R-BJ1-atx-f-12-0-UI"
 /lab_host="DH10B (Life Technologies)"
 /clone_lib="UI-R-BJ1"
 /note="Vector: p773D-Pac (Pharmacia) with a modified
 polylinker; Site 1: Not 1; Site 2: Eco RI; The UI-R-BJ1
 library is a subtracted library derived from the following
 tissues: atrium at 16.5 dpc, ventricle at 16.5 dpc, AV
 canal at 16.5 dpc, atrium at 15 dpc, ventricle at 15 dpc,
 AV canal at 15 dpc, ventricle at 13 dpc, and adult heart.
 For a detailed description of the library from which this
 clone was derived, please visit our web site at
 ratest.eng.uiowa.edu. The subtraction has been previously
 described in (Bonaldo, Lennon and Soares, Genome Research
 6:791-806, 1996)
 TAG_SEQ=None found"

ORIGIN
 Query Match 100.0%; Score 10; DB 2; Length 166;
 Best Local Similarity 100.0%; Pred. No. 1.1e+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 CGAACGTTTCG 10
 |||||
 Db 106 CGAACGTTTCG 97

RESULT 61
 BM174423
 LOCUS BM174423 167 bp mRNA linear EST 05-DEC-2001
 DEFINITION Tm ad 29C08 SKPL Trichuris muris (parasitic nematode) mixed adult
 Trichuris muris cDNA clone Tm_ad_29C08 5', mRNA sequence.
 ACCESSION BM174423
 VERSION BM174423.1 GI:17353308
 KEYWORDS EST.
 SOURCE Trichuris muris

ORGANISM Trichuris muris
 Eukaryota; Metazoa; Nematoda; Enoplea; Trichocephalida;
 Trichuridae; Trichuris.
 REFERENCE 1 (bases 1 to 167)
 AUTHORS Blaxter,M.L., Parkinson,J., Whitton,C., Daub,J., Guiliano,D.,
 Hall,N., Quayle,M. and Barrell,B.
 TITLE Edinburgh University/Sanger Centre Nematode EST Project
 JOURNAL Unpublished (2000)
 COMMENT Contact: Blaxter ML
 Institute of Cell, Animal and Population Biology
 University of Edinburgh
 Ashworth Labs, King's Buildings, West Mains Road, Edinburgh, EH9
 3JT, UK.
 Tel: +44 131 650 6760
 Fax: +44 131 670 5450
 Email: mark.blaxter@ed.ac.uk
 The library was prepared by Richard Grensis, Manchester University,
 Manchester. Sequencing was performed by the Pathogen Sequencing
 Unit, Sanger Centre, Cambridge, UK (Neil Hall, Mike Quail & Bart
 Barrell).
 PCR Primers
 FORWARD: T3
 BACKWARD: T7PL
 Plate: 29 Row: C column: 08
 Seq primer: SKPL
 High quality sequence stop: 167.
 Location/Qualifiers
 1..167
 /organism="Trichuris muris"
 /mol_type="mRNA"
 /db_xref="taxon:70415"
 /clone="Tm ad 29C08"
 /sex="mixed"
 /dev_stage="adult"
 /clone_lib="Trichuris muris (parasitic nematode) mixed
 adult"
 /note="Vector: Lambda Zap II; Site 1: EcoRI (5'end);
 Site 2: XhoI (3'end); Trichuris muris is a nematode
 parasite of rodents related to the human whipworm
 Trichuris trichiura. The library was constructed from
 Trichuris muris adults (Edinburgh 'E' strain) maintained
 in mice, and was provided by Dr. Richard Grensis,
 University of Manchester."

ORIGIN
 Query Match 100.0%; Score 10; DB 4; Length 167;
 Best Local Similarity 100.0%; Pred. No. 1.1e+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 CGAACGTTTCG 10
 |||||
 Db 83 CGAACGTTTCG 92

RESULT 62
 BM174423/c
 LOCUS BM174423 167 bp mRNA linear EST 05-DEC-2001
 DEFINITION Tm ad 29C08 SKPL Trichuris muris (parasitic nematode) mixed adult
 Trichuris muris cDNA clone Tm_ad_29C08 5', mRNA sequence.
 ACCESSION BM174423
 VERSION BM174423.1 GI:17353308
 KEYWORDS EST.
 SOURCE Trichuris muris
 ORGANISM Trichuris muris
 Eukaryota; Metazoa; Nematoda; Enoplea; Trichocephalida;
 Trichuridae; Trichuris.
 REFERENCE 1 (bases 1 to 167)
 AUTHORS Blaxter,M.L., Parkinson,J., Whitton,C., Daub,J., Guiliano,D.,
 Hall,N., Quayle,M. and Barrell,B.
 TITLE Edinburgh University/Sanger Centre Nematode EST Project
 JOURNAL Unpublished (2000)
 COMMENT Contact: Blaxter ML
 Institute of Cell, Animal and Population Biology

University of Edinburgh
 Ashworth Labs, King's Buildings, West Mains Road, Edinburgh, EH9
 3JT, UK.
 Tel: +44 131 650 6760
 Fax: +44 131 670 5450
 Email: mark.blaxter@ed.ac.uk
 The library was prepared by Richard Grencis, Manchester University,
 Manchester. Sequencing was performed by the Pathogen Sequencing
 Unit, Sanger Centre, Cambridge, UK (Neil Hall, Mike Quail & Bart
 Barrell).

PCR Primers
 FORWARD: T3
 BACKWARD: T7PL
 Plate: 29 row: C column: 08
 Seq primer: SKPL
 High quality sequence stop: 167.

FEATURES

source
 1. .167
 /organism="Trichuris muris"
 /mol_type="mRNA"
 /db_xref="taxon:70415"
 /clone="Tm_ad_29C08"
 /sex="mixed"
 /dev_stage="adult"
 /clone_lib="Trichuris muris (parasitic nematode) mixed
 adult"
 /note="Vector: Lambda Zap II; Site 1: EcoRI (5'end);
 Site 2: XhoI (3'end); Trichuris muris is a nematode
 parasite of rodents related to the human whipworm
 Trichuris trichiura. The library was constructed from
 Trichuris muris adults (Edinburgh 'E' strain) maintained
 in mice, and was provided by Dr. Richard Grencis,
 University of Manchester."

ORIGIN

Query Match 100.0%; Score 10; DB 4; Length 167;
 Best Local Similarity 100.0%; Pred. No. 1.1e+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 |||||
 Db 92 CGAACGTTTCG 83

RESULT 63

BH226178
 LOCUS 1006130E11.y1 1006 - RescueMu Grid G Zea mays genomic, genomic
 DEFINITION 167 bp DNA linear GSS 08-NOV-2001
 survey sequence.

ACCESSION BH226178
 VERSION BH226178.1 GI:16824887
 KEYWORDS GSS.

SOURCE

ORGANISM Zea mays
 Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
 Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD
 clade; Panicoideae; Andropogoneae; Zea.
 1 (bases 1 to 167)

REFERENCE

AUTHORS Walbot, V.
 TITLE Maize genomic sequences found using engineered RescueMu transposon
 JOURNAL Unpublished (2001)
 COMMENT Contact: Walbot V
 Department of Biological Sciences
 Stanford University
 855 California Ave, Palo Alto, CA 94304, USA
 Tel: 650 723 2227
 Fax: 650 725 8221
 Email: walbot@stanford.edu

Possible ligation site so sequence was trimmed. Post-ligation
 sequence submitted separately.
 Plate: 1006130 row: 11
 Class: transposon-tagged.
 Location/Qualifiers

FEATURES

source

1. .167
 /organism="Zea mays"
 /mol_type="genomic DNA"
 /cultivar="mixed background W23/A188/B73"
 /db_xref="taxon:4577"
 /tissue_type="leaf"
 /dev_stage="adult"
 /lab_host="DH10B"
 /clone_lib="1006 - RescueMu Grid G"
 /note="Organ: leaf; Vector: RescueMu (engineered from
 pBlueScript backbone); Site 1: BamHI; Site 2: BglII;
 RescueMu is a 4.9 kb, modified maize Mu transposon
 designed to allow plasmid rescue from total genomic DNA.
 Mu elements insert preferentially into transcription
 units. For more information on RescueMu, go to the web
 site 'www.zmdb.lastate.edu' and follow the links for
 'RescueMu.' Grid G was grown at Stanford in 2000. DNA was
 extracted from leaf punches, double digested using BamHI
 and BglII, and ligated to form circular plasmids. DH10B
 cells were transformed and then screened on LB plates with
 ampicillin."

ORIGIN

Query Match 100.0%; Score 10; DB 8; Length 167;
 Best Local Similarity 100.0%; Pred. No. 1.1e+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 |||||
 Db 33 CGAACGTTTCG 42

RESULT 64

BH226178/c
 LOCUS 1006130E11.y1 1006 - RescueMu Grid G Zea mays genomic, genomic
 DEFINITION 167 bp DNA linear GSS 08-NOV-2001
 survey sequence.

ACCESSION BH226178
 VERSION BH226178.1 GI:16824887
 KEYWORDS GSS.

SOURCE

ORGANISM Zea mays
 Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
 Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD
 clade; Panicoideae; Andropogoneae; Zea.
 1 (bases 1 to 167)

REFERENCE

AUTHORS Walbot, V.
 TITLE Maize genomic sequences found using engineered RescueMu transposon
 JOURNAL Unpublished (2001)
 COMMENT Contact: Walbot V
 Department of Biological Sciences
 Stanford University
 855 California Ave, Palo Alto, CA 94304, USA
 Tel: 650 723 2227
 Fax: 650 725 8221
 Email: walbot@stanford.edu

Possible ligation site so sequence was trimmed. Post-ligation
 sequence submitted separately.
 Plate: 1006130 row: 11
 Class: transposon-tagged.
 Location/Qualifiers

FEATURES

source

1. .167
 /organism="Zea mays"
 /mol_type="genomic DNA"
 /cultivar="mixed background W23/A188/B73"
 /db_xref="taxon:4577"
 /tissue_type="leaf"
 /dev_stage="adult"
 /lab_host="DH10B"
 /clone_lib="1006 - RescueMu Grid G"
 /note="Organ: leaf; Vector: RescueMu (engineered from
 pBlueScript backbone); Site 1: BamHI; Site 2: BglII;
 RescueMu is a 4.9 kb, modified maize Mu transposon

designed to allow plasmid rescue from total genomic DNA. Mu elements insert preferentially into transcription units. For more information on RescueMu, go to the web site 'www.zmdb.iastate.edu' and follow the links for 'RescueMu.' Grid G was grown at Stanford in 2000. DNA was extracted from leaf punches, double digested using BamHI and BglII, and ligated to form circular plasmids. DH10B cells were transformed and then screened on LB plates with ampicillin."

ORIGIN

Query Match 100.0%; Score 10; DB 8; Length 167;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
| | | | | | | | | |
Db 42 CGAACGTTTCG 33

RESULT 65

BH226234
LOCUS 167 bp DNA linear GSS 08-NOV-2001
DEFINITION 1006130H08.y1 1006 - RescueMu Grid G Zea mays genomic, genomic survey sequence.
ACCESSION BH226234
VERSION BH226234.1 GI:16825007
KEYWORDS GSS.
SOURCE Zea mays
ORGANISM Zea mays

REFERENCE

Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD clade; Panicoideae; Andropogoneae; Zea.

1 (bases 1 to 167)
Walbot, V.

AUTHORS

Maize genomic sequences found using engineered RescueMu transposon
Unpublished (2001)
Contact: Walbot V
Department of Biological Sciences
Stanford University
855 California Ave, Palo Alto, CA 94304, USA
Tel: 650 723 2227
Fax: 650 725 8221
Email: walbot@stanford.edu
Very probable ligation site found so sequence was trimmed.
Post-ligation sequence submitted separately.
Plate: 1006130 row: 11
Class: transposon-tagged.

FEATURES

source

1. 167
/organism="Zea mays"
/mol_type="genomic DNA"
/cultivar="mixed background W23/Al88/B73"
/db_xref="taxon:4577"
/tissue_type="leaf"
/dev_stage="adult"
/lab_host="DH10B"
/clone_lib="1006 - RescueMu Grid G"
/notes="Organ: leaf; Vector: RescueMu (engineered from pBluescript backbone); Site 1: BamHI; Site 2: BglII; RescueMu is a 4.9 kb, modified maize Mu transposon designed to allow plasmid rescue from total genomic DNA. Mu elements insert preferentially into transcription units. For more information on RescueMu, go to the web site 'www.zmdb.iastate.edu' and follow the links for 'RescueMu.' Grid G was grown at Stanford in 2000. DNA was extracted from leaf punches, double digested using BamHI and BglII, and ligated to form circular plasmids. DH10B cells were transformed and then screened on LB plates with ampicillin."

ORIGIN

Query Match 100.0%; Score 10; DB 8; Length 167;

Query Match

Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
| | | | | | | | | |
Db 33 CGAACGTTTCG 42

RESULT 66
BH226234/c
LOCUS 167 bp DNA linear GSS 08-NOV-2001
DEFINITION 1006130H08.y1 1006 - RescueMu Grid G Zea mays genomic, genomic survey sequence.
ACCESSION BH226234
VERSION BH226234.1 GI:16825007
KEYWORDS GSS.
SOURCE Zea mays
ORGANISM Zea mays

Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD clade; Panicoideae; Andropogoneae; Zea.

1 (bases 1 to 167)
Walbot, V.

REFERENCE

Maize genomic sequences found using engineered RescueMu transposon
Unpublished (2001)
Contact: Walbot V
Department of Biological Sciences
Stanford University
855 California Ave, Palo Alto, CA 94304, USA
Tel: 650 723 2227
Fax: 650 725 8221
Email: walbot@stanford.edu
Very probable ligation site found so sequence was trimmed.
Post-ligation sequence submitted separately.
Plate: 1006130 row: 11
Class: transposon-tagged.

AUTHORS

TITLE

JOURNAL

COMMENT

FEATURES

source

1. 167
/organism="Zea mays"
/mol_type="genomic DNA"
/cultivar="mixed background W23/Al88/B73"
/db_xref="taxon:4577"
/tissue_type="leaf"
/dev_stage="adult"
/lab_host="DH10B"
/clone_lib="1006 - RescueMu Grid G"
/notes="Organ: leaf; Vector: RescueMu (engineered from pBluescript backbone); Site 1: BamHI; Site 2: BglII; RescueMu is a 4.9 kb, modified maize Mu transposon designed to allow plasmid rescue from total genomic DNA. Mu elements insert preferentially into transcription units. For more information on RescueMu, go to the web site 'www.zmdb.iastate.edu' and follow the links for 'RescueMu.' Grid G was grown at Stanford in 2000. DNA was extracted from leaf punches, double digested using BamHI and BglII, and ligated to form circular plasmids. DH10B cells were transformed and then screened on LB plates with ampicillin."

ORIGIN

Query Match 100.0%; Score 10; DB 8; Length 167;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

Db 42 CGAACGTTTCG 33

RESULT 67

BH226364
LOCUS 167 bp DNA linear GSS 08-NOV-2001
DEFINITION 1006131G03.y1 1006 - RescueMu Grid G Zea mays genomic, genomic survey sequence.

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survey sequence.
ACCESSION      BH226364
VERSION        BH226364.1 GI:16825270
KEYWORDS       GSS.
SOURCE         Zea mays
ORGANISM       Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD
clade; Panicoideae; Andropogoneae; Zea.
1 (bases 1 to 167)

REFERENCE
AUTHORS        Walbot, V.
TITLE          Maize genomic sequences found using engineered RescueMu transposon
JOURNAL        Unpublished (2001)
COMMENT        Contact: Walbot V
                Department of Biological Sciences
                Stanford University
                855 California Ave, Palo Alto, CA 94304, USA
                Tel: 650 723 2227
                Fax: 650 725 8221
                Email: walbot@stanford.edu
                Very probable ligation site found so sequence was trimmed.
                Post-ligation sequence submitted separately.
                Plate: 1006131 row: 11
                Class: transposon-tagged.
                Location/Qualifiers
                1..167
                /organism="Zea mays"
                /mol_type="genomic DNA"
                /cultivar="mixed background W23/A188/B73"
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                /tissue_type="leaf"
                /dev_stage="adult"
                /lab_host="DH10B"
                /clone_lib="1006 - RescueMu Grid G"
                /notes="Organ: leaf; Vector: RescueMu (engineered from
                pBlueScript backbone); Site 1: BamHI; Site 2: BglII;
                RescueMu is a 4.9 kb, modified maize Mu transposon
                designed to allow plasmid rescue from total genomic DNA.
                Mu elements insert preferentially into transcription
                units. For more information on RescueMu, go to the web
                site 'www.zmdb.iastate.edu' and follow the links for
                'RescueMu.' Grid G was grown at Stanford in 2000. DNA was
                extracted from leaf punches, double digested using BamHI
                and BglII, and ligated to form circular plasmids. DH10B
                cells were transformed and then screened on LB plates with
                ampicillin."

FEATURES
source
1..167
/organism="Zea mays"
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/cultivar="mixed background W23/A188/B73"
/db_xref="taxon:4577"
/tissue_type="leaf"
/dev_stage="adult"
/lab_host="DH10B"
/clone_lib="1006 - RescueMu Grid G"
/notes="Organ: leaf; Vector: RescueMu (engineered from
pBlueScript backbone); Site 1: BamHI; Site 2: BglII;
RescueMu is a 4.9 kb, modified maize Mu transposon
designed to allow plasmid rescue from total genomic DNA.
Mu elements insert preferentially into transcription
units. For more information on RescueMu, go to the web
site 'www.zmdb.iastate.edu' and follow the links for
'RescueMu.' Grid G was grown at Stanford in 2000. DNA was
extracted from leaf punches, double digested using BamHI
and BglII, and ligated to form circular plasmids. DH10B
cells were transformed and then screened on LB plates with
ampicillin."

ORIGIN
Query Match      100.0%; Score 10; DB 8; Length 167;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTTTCG 10
        |||||
Db      51 CGAACGTTTCG 42

RESULT 69
CF495616
LOCUS      168 bp mRNA linear EST 30-APR-2004
DEFINITION ML1-0017T-R142-D02-U-G ML1-0017 Schistosoma mansoni cDNA clone
            ML1-0017T-R142-D02-G similar to SR2 retrotransposon, mRNA sequence.
ACCESSION  CF495616
VERSION     CF495616.1 GI:46988641
KEYWORDS    EST.
SOURCE      Schistosoma mansoni
ORGANISM    Schistosoma mansoni
            Eukaryota; Metazoa; Platyhelminthes; Trematoda; Digenea;
            Strigeidida; Schistosomatoidea; Schistosomatidae; Schistosoma.
1 (bases 1 to 168)
DeMarco, R., Kowalcowski, A.T., Machado, A.A., Soares, M.B.,
Margoni, C., Kawano, T., Rodrigues, V., Madeira, A.M.B.N.,
Wilson, R.A., Menck, C.F.M., Setubal, M.C., Dias-Neto, E., Leite, L.C.C.
and Verjovski-Almeida, S.
Saci-1, -2 and -3 and Perere, four novel retrotransposons with high
transcriptional activities from the human parasite Schistosoma
mansoni
J. Virol. 78 (6), 2967-2978 (2004)
Contact: Dr. Sergio Verjovski-Almeida
Departamento de Bioquímica
Instituto de Química - Universidade de São Paulo
Av. Prof. Lineu Prestes 748 sala 1200, 05508-900 São Paulo - SP,
Brasil
Tel: +55-11-3091-2173
Fax: +55-11-3091-2186

JOURNAL
COMMENT

```

Email: verjoe@iq.usp.br

This sequence was derived from the FAPESP Schistosoma mansoni EST Genome Project. All sequences in the project were assembled and annotated. This entry and all the assembled sequences can be seen in the following URL <http://bioinfo.iq.usp.br/schisto/>
Plate: MLI-0017T-R142 row: 2 column: D.

FEATURES

source

1. .168
Location/Qualifiers
/organism="Schistosoma mansoni"
/mol_type="mRNA"
/db_xref="taxon:6183"
/clone="MLI-0017T-R142-D02.G"
/sex="mixed pool"
/dev_stage="miracidium"
/clone_lib="MLI-0017"
/note="Vector: pGEM T-easy"

ORIGIN

Query Match 100.0%; Score 10; DB 7; Length 168;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

Db 77 CGAACGTTTCG 86

RESULT 70

CF495616/c

LOCUS

CF495616 168 bp mRNA linear EST 30-APR-2004
MLI-0017T-R142-D02-U.G MLI-0017 Schistosoma mansoni cDNA clone
MLI-0017T-R142-D02.G similar to SR2 retrotransposon, mRNA sequence.

ACCESSION

VERSION

KEYWORDS

SOURCE

ORGANISM

REFERENCE

AUTHORS

TITLE

JOURNAL

COMMENT

CF495616.1 GI:46888641
EST
Schistosoma mansoni
Schistosoma mansoni
Eukaryota; Metazoa; Platyhelminthes; Trematoda; Digenea;
Strigoida; Schistosomatoidea; Schistosomatidae; Schistosoma.
1 (bases 1 to 168)
DeMarco, R., Kowaltowski, A.T., Machado, A.A., Soares, M.B.,
Gargioni, C., Kawano, T., Rodrigues, V., Madeira, A.M.N.,
Wilson, R.A., Menck, C.F.M., Setubal, M.C., Dias-Neto, E., Leite, L.C.C.
and Verjovski-Almeida, S.
Saci-1, -2 and -3 and Perere, four novel retrotransposons with high
transcriptional activities from the human parasite Schistosoma
mansoni

J. Virol. 78 (6), 2967-2978 (2004)
Contact: Dr. Sergio Verjovski-Almeida
Departamento de Bioquímica
Instituto de Química - Universidade de São Paulo
Av. Prof. Lineu Prestes 748 sala 1200, 05508-900 São Paulo - SP,
Brasil

Tel: +55-11-3091-2173
Fax: +55-11-3091-2186
Email: verjoe@iq.usp.br

This sequence was derived from the FAPESP Schistosoma mansoni EST Genome Project. All sequences in the project were assembled and annotated. This entry and all the assembled sequences can be seen in the following URL <http://bioinfo.iq.usp.br/schisto/>
Plate: MLI-0017T-R142 row: 2 column: D.

FEATURES

source

1. .168
Location/Qualifiers
/organism="Schistosoma mansoni"
/mol_type="mRNA"
/db_xref="taxon:6183"
/clone="MLI-0017T-R142-D02.G"
/sex="mixed pool"
/dev_stage="miracidium"
/clone_lib="MLI-0017"
/note="Vector: pGEM T-easy"

ORIGIN

Query Match 100.0%; Score 10; DB 7; Length 168;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

Db 152 CGAACGTTTCG 161

RESULT 72

R04873/c

LOCUS

R04873

168 bp mRNA linear

EST 31-MAR-1995

Query Match 100.0%; Score 10; DB 7; Length 168;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

Db 86 CGAACGTTTCG 77

RESULT 71

R04873

LOCUS

DEFINITION

ACCESSION

VERSION

KEYWORDS

SOURCE

ORGANISM

REFERENCE

AUTHORS

TITLE

JOURNAL

COMMENT

CF495616.1 GI:46888641

EST

Schistosoma mansoni

Schistosoma mansoni

Eukaryota; Metazoa; Platyhelminthes; Trematoda; Digenea;

Strigoida; Schistosomatoidea; Schistosomatidae; Schistosoma.

1 (bases 1 to 168)

DeMarco, R., Kowaltowski, A.T., Machado, A.A., Soares, M.B.,

Gargioni, C., Kawano, T., Rodrigues, V., Madeira, A.M.N.,

Wilson, R.A., Menck, C.F.M., Setubal, M.C., Dias-Neto, E., Leite, L.C.C.

and Verjovski-Almeida, S.

Saci-1, -2 and -3 and Perere, four novel retrotransposons with high

transcriptional activities from the human parasite Schistosoma

mansoni

J. Virol. 78 (6), 2967-2978 (2004)

Contact: Dr. Sergio Verjovski-Almeida

Departamento de Bioquímica

Instituto de Química - Universidade de São Paulo

Av. Prof. Lineu Prestes 748 sala 1200, 05508-900 São Paulo - SP,

Brasil

Tel: +55-11-3091-2173

Fax: +55-11-3091-2186

Email: verjoe@iq.usp.br

This sequence was derived from the FAPESP Schistosoma mansoni EST

Genome Project. All sequences in the project were assembled and

annotated. This entry and all the assembled sequences can be seen

in the following URL <http://bioinfo.iq.usp.br/schisto/>

Plate: MLI-0017T-R142 row: 2 column: D.

Location/Qualifiers

1. .168

/organism="Schistosoma mansoni"

/mol_type="mRNA"

/db_xref="taxon:6183"

/clone="MLI-0017T-R142-D02.G"

/sex="mixed pool"

/dev_stage="miracidium"

/clone_lib="MLI-0017"

/note="Vector: pGEM T-easy"

Query Match 100.0%; Score 10; DB 7; Length 168;

Best Local Similarity 100.0%; Pred. No. 1.1e+04;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

Db 152 CGAACGTTTCG 161

RESULT 72

R04873/c

LOCUS

R04873

168 bp mRNA linear

EST 31-MAR-1995

```

DEFINITION pk33h10.f1 Kuwabara Mixed stage C. briggsae Caenorhabditis briggsae
cDNA, mRNA sequence.
ACCESSION R04873
VERSION R04873.1 GI:754609
KEYWORDS EST.
SOURCE Caenorhabditis briggsae
ORGANISM Caenorhabditis briggsae
REFERENCE 1 (bases 1 to 168)
AUTHORS Hillier, L., Chiapelli, B., Chisoso, S., Ciark, N., Couch, J.,
Dubuque, T., Hawkins, M., Holman, M., Hultman, M., Kucaba, T.,
Kuwabara, P., Le, M., Mardis, E., Marra, M., Parsons, J., Rifkin, L.,
Rohlfing, T., Tan, F., Trevaskis, E., Waterston, R., Wohlmann, P. and
Wilson, R.
TITLE Washington University Caenorhabditis briggsae EST project
JOURNAL Unpublished (1995)
COMMENT Contact: Marra NA
Washington University Genome Sequencing Center
Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
Tel: 314 286 1455
Fax: 314 286 1810
Email: mmarr@watson.wustl.edu
PCR F: TGTAACACGCGCAGTCCAGTTCAGCCTGG
PCR B: CAGGAACAGCTATGACCTGTATGATTTCTCCAGGTA
Source: Washington University Genome Sequencing Center
PCR amplified DNA is available from Washington University Genome
Sequencing Center. Aliquots of the library may be requested from P.
Kuwabara (pek@mc-lmb.cam.ac.uk).
Seq primer: Commercially available M13 reverse dye primer.
FEATURES
source
1..168
Location/Qualifiers
/organism="Caenorhabditis briggsae"
/mol_type="mRNA"
/strain="G16 Gujarat"
/db_xref="taxon:6238"
/clone_lib="Kuwabara Mixed stage C. briggsae"
/notes="Vector: Lambda gt10; Site 1: EcoRI; Site 2: EcoRI;
Stage: mixed, Sex: hermaphrodite. Library construction:
First strand oligo (dT) primed. Second strand was as per
Gubler/Hoffman. Ligated to EcoRI adaptors. Library is
non-directional. Library is non-normalized. Library is
constructed by P.E. Kuwabara. Additional details on
construction of the library are described in P.E.
Kuwabara and S. Shah, NAR 22: 4414 - 4418 (1994). Adaptor
sequence: GAATTC CGTGTGCTGTCG"

ORIGIN
Query Match 100.0%; Score 10; DB 7; Length 168;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
|||||
Db 161 CGAACGTTTCG 152

RESULT 73
BH226103
LOCUS 1006130A12.y1 1006 - RescueMu Grid G Zea mays genomic, genomic
survey sequence.
DEFINITION BH226103
ACCESSION BH226103
VERSION BH226103.1 GI:16824735
KEYWORDS GSS.
SOURCE Zea mays
ORGANISM Zea mays
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD
clade; Panicoideae; Andropogoneae; Zea.
REFERENCE 1 (bases 1 to 168)
AUTHORS Walbot, V.

Maize genomic sequences found using engineered RescueMu transposon
Unpublished (2001)
Contact: Walbot V
Department of Biological Sciences
Stanford University
855 California Ave, Palo Alto, CA 94304, USA
Tel: 650 723 2227
Fax: 650 725 8221
Email: walbot@stanford.edu
Possible ligation site so sequence was trimmed. Post-ligation
sequence submitted separately.
Plate: 1006130 row: 11
Class: transposon-tagged.
Location/Qualifiers
1..168
/organism="Zea mays"
/mol_type="genomic DNA"
/cultivar="mixed background W23/A188/B73"
/db_xref="taxon:4577"
/tissue_type="leaf"
/dev_stage="adult"
/lab_host="DH10B"
/clone_lib="1006 - RescueMu Grid G"
/notes="Organ: leaf; Vector: RescueMu (engineered from
pBlueScript backbone); Site 1: BamHI; Site 2: BglII;
RescueMu is a 4.9 kb, modified maize Mu transposon
designed to allow plasmid rescue from total genomic DNA.
Mu elements insert preferentially into transcription
units. For more information on RescueMu, go to the web
site 'www.zmdb.iastate.edu' and follow the links for
'RescueMu.' Grid G was grown at Stanford in 2000. DNA was
extracted from leaf punches, double digested using BamHI
and BglII, and ligated to form circular plasmids. DH10B
cells were transformed and then screened on LB plates with
ampicillin."

ORIGIN
Query Match 100.0%; Score 10; DB 8; Length 168;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
|||||
Db 34 CGAACGTTTCG 43

RESULT 74
BH226103/c
LOCUS 1006130A12.y1 1006 - RescueMu Grid G Zea mays genomic, genomic
survey sequence.
DEFINITION BH226103
ACCESSION BH226103
VERSION BH226103.1 GI:16824735
KEYWORDS GSS.
SOURCE Zea mays
ORGANISM Zea mays
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD
clade; Panicoideae; Andropogoneae; Zea.
REFERENCE 1 (bases 1 to 168)
AUTHORS Walbot, V.

Maize genomic sequences found using engineered RescueMu transposon
Unpublished (2001)
Contact: Walbot V
Department of Biological Sciences
Stanford University
855 California Ave, Palo Alto, CA 94304, USA
Tel: 650 723 2227
Fax: 650 725 8221
Email: walbot@stanford.edu
Possible ligation site so sequence was trimmed. Post-ligation
sequence submitted separately.
Plate: 1006130 row: 11

```

```

TITLE
JOURNAL
COMMENT

Maize genomic sequences found using engineered RescueMu transposon
Unpublished (2001)
Contact: Walbot V
Department of Biological Sciences
Stanford University
855 California Ave, Palo Alto, CA 94304, USA
Tel: 650 723 2227
Fax: 650 725 8221
Email: walbot@stanford.edu
Possible ligation site so sequence was trimmed. Post-ligation
sequence submitted separately.
Plate: 1006130 row: 11
Class: transposon-tagged.
Location/Qualifiers
1..168
/organism="Zea mays"
/mol_type="genomic DNA"
/cultivar="mixed background W23/A188/B73"
/db_xref="taxon:4577"
/tissue_type="leaf"
/dev_stage="adult"
/lab_host="DH10B"
/clone_lib="1006 - RescueMu Grid G"
/notes="Organ: leaf; Vector: RescueMu (engineered from
pBlueScript backbone); Site 1: BamHI; Site 2: BglII;
RescueMu is a 4.9 kb, modified maize Mu transposon
designed to allow plasmid rescue from total genomic DNA.
Mu elements insert preferentially into transcription
units. For more information on RescueMu, go to the web
site 'www.zmdb.iastate.edu' and follow the links for
'RescueMu.' Grid G was grown at Stanford in 2000. DNA was
extracted from leaf punches, double digested using BamHI
and BglII, and ligated to form circular plasmids. DH10B
cells were transformed and then screened on LB plates with
ampicillin."

ORIGIN
Query Match 100.0%; Score 10; DB 8; Length 168;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
|||||
Db 34 CGAACGTTTCG 43

RESULT 74
BH226103/c
LOCUS 1006130A12.y1 1006 - RescueMu Grid G Zea mays genomic, genomic
survey sequence.
DEFINITION BH226103
ACCESSION BH226103
VERSION BH226103.1 GI:16824735
KEYWORDS GSS.
SOURCE Zea mays
ORGANISM Zea mays
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD
clade; Panicoideae; Andropogoneae; Zea.
REFERENCE 1 (bases 1 to 168)
AUTHORS Walbot, V.

Maize genomic sequences found using engineered RescueMu transposon
Unpublished (2001)
Contact: Walbot V
Department of Biological Sciences
Stanford University
855 California Ave, Palo Alto, CA 94304, USA
Tel: 650 723 2227
Fax: 650 725 8221
Email: walbot@stanford.edu
Possible ligation site so sequence was trimmed. Post-ligation
sequence submitted separately.
Plate: 1006130 row: 11

```

```

Class: transposon-tagged.
FEATURES
  source
    1. .168
    /location/Qualifiers
    1. .168
    /organism="Zea mays"
    /mol_type="genomic DNA"
    /cultivar="mixed background W23/A188/B73"
    /db_xref="taxon:4577"
    /tissue_type="leaf"
    /dev_stage="adult"
    /lab_host="DH10B"
    /clone_lib="1006 - RescueMu Grid G"
    /note="Organ: leaf; Vector: RescueMu (engineered from pBlueScript backbone); Site: 1: BamHI, Site: 2: BglII; RescueMu is a 4.9 kb, modified maize Mu transposon designed to allow plasmid rescue from total genomic DNA. Mu elements insert preferentially into transcription units. For more information on RescueMu, go to the web site 'www.zmdb.iastate.edu' and follow the links for 'RescueMu.' Grid G was grown at Stanford in 2000. DNA was extracted from leaf punches, double digested using BamHI and BglII, and ligated to form circular plasmids. DH10B cells were transformed and then screened on LB plates with ampicillin."
ORIGIN
  Query Match      100.0%; Score 10; DB 8; Length 168;
  Best Local Similarity 100.0%; Pred. No. 1.1e+04;
  Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

  Qy 1 CGAACGTTTCG 10
      |||
  Db 43 CGAACGTTTCG 34

RESULT 75
FR0044729
LOCUS      169 bp      DNA      linear      GSS 25-FEB-2004
DEFINITION Fugu rubripes GSS sequence, clone 192G14fd11, genomic survey
sequence.
ACCESSION  AL132221
VERSION     AL132221.1 GI:6114167
KEYWORDS   GSS; genome survey sequence.
SOURCE     Takifugu rubripes (Fugu rubripes)
ORGANISM   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
  Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
  Acanthomorpha; Acanthopterygii; Percormorpha; Tetraodontiformes;
  Tetraodontidae; Tetraodontidae; Takifugu.
REFERENCE  1
AUTHORS   Elgar,G., Clark,M.S., Meek,S., Smith,S., Warner,S., Edwards,Y.J.,
  Bouchireb,N., Cottage,A., Yeo,G.S., Umrانيا,Y., Williams,G. and
  Brenner,S.
TITLE     Generation and analysis of 25 Mb of genomic DNA from the pufferfish
  Fugu rubripes by sequence scanning
JOURNAL   Genome Res. 9 (10), 960-971 (1999)
MEDLINE   99455097
PUBMED    10523524
REFERENCE  2 (bases 1 to 169)
AUTHORS   Elgar,G., Clark,M.S., Smith,S., Meek,S., Warner,S., Edwards,Y.J.K.,
  Umrانيا,Y., Williams,G. and Brenner,S.
TITLE     Direct Submission
JOURNAL   Submitted (11-OCT-1999) MRC Human Genome Mapping Project Resource
  Centre, Hinxton, Cambridge, CB10 1SB. UK Email:
  biohelp@hgm.mrc.ac.uk
COMMENT   Vector: pBluescript II KS
  V.type: phagemid
  PRIMER: KS
  DESCR:
  One pass dye-terminator sequencing of cosmid cloned genomic
  sequence.
FEATURES
  source
    1. .169
    /organism="Takifugu rubripes"
    /mol_type="genomic DNA"
    /db_xref="taxon:31033"
    /clone_lib="192G14fd11"
    /clone_lib="cosmid 192G14"
ORIGIN
  Query Match      100.0%; Score 10; DB 9; Length 169;
  Best Local Similarity 100.0%; Pred. No. 1.1e+04;
  Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

  Qy 1 CGAACGTTTCG 10
      |||
  Db 145 CGAACGTTTCG 136

RESULT 77
AU241486
LOCUS      174 bp      mRNA      linear      EST 15-JAN-2002
DEFINITION AU241486 UV irradiated OLHNI cell line cDNA library (OLC) Oryzias
  latipes
  source
    1. .169
    /organism="Takifugu rubripes"

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/mol_type="genomic DNA"
/db_xref="taxon:31033"
/clone_lib="192G14fd11"
/clone_lib="cosmid 192G14"

Query Match      100.0%; Score 10; DB 9; Length 169;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
    |||
Db 136 CGAACGTTTCG 145

RESULT 76
FR0044729/c
LOCUS      169 bp      DNA      linear      GSS 25-FEB-2004
DEFINITION Fugu rubripes GSS sequence, clone 192G14fd11, genomic survey
sequence.
ACCESSION  AL132221
VERSION     AL132221.1 GI:6114167
KEYWORDS   GSS; genome survey sequence.
SOURCE     Takifugu rubripes (Fugu rubripes)
ORGANISM   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
  Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
  Acanthomorpha; Acanthopterygii; Percormorpha; Tetraodontiformes;
  Tetraodontidae; Tetraodontidae; Takifugu.
REFERENCE  1
AUTHORS   Elgar,G., Clark,M.S., Meek,S., Smith,S., Warner,S., Edwards,Y.J.,
  Bouchireb,N., Cottage,A., Yeo,G.S., Umrانيا,Y., Williams,G. and
  Brenner,S.
TITLE     Generation and analysis of 25 Mb of genomic DNA from the pufferfish
  Fugu rubripes by sequence scanning
JOURNAL   Genome Res. 9 (10), 960-971 (1999)
MEDLINE   99455097
PUBMED    10523524
REFERENCE  2 (bases 1 to 169)
AUTHORS   Elgar,G., Clark,M.S., Smith,S., Meek,S., Warner,S., Edwards,Y.J.K.,
  Umrانيا,Y., Williams,G. and Brenner,S.
TITLE     Direct Submission
JOURNAL   Submitted (11-OCT-1999) MRC Human Genome Mapping Project Resource
  Centre, Hinxton, Cambridge, CB10 1SB. UK Email:
  biohelp@hgm.mrc.ac.uk
COMMENT   Vector: pBluescript II KS
  V.type: phagemid
  PRIMER: KS
  DESCR:
  One pass dye-terminator sequencing of cosmid cloned genomic
  sequence.
FEATURES
  source
    1. .169
    /organism="Takifugu rubripes"
    /mol_type="genomic DNA"
    /db_xref="taxon:31033"
    /clone_lib="192G14fd11"
    /clone_lib="cosmid 192G14"
ORIGIN
  Query Match      100.0%; Score 10; DB 9; Length 169;
  Best Local Similarity 100.0%; Pred. No. 1.1e+04;
  Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

  Qy 1 CGAACGTTTCG 10
      |||
  Db 145 CGAACGTTTCG 136

RESULT 77
AU241486
LOCUS      174 bp      mRNA      linear      EST 15-JAN-2002
DEFINITION AU241486 UV irradiated OLHNI cell line cDNA library (OLC) Oryzias
  latipes
  source
    1. .169
    /organism="Takifugu rubripes"

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/db xref="taxon:9606"
 /clone="IMAGE:2377675"
 /sex="male"
 /dev_stage="adult, age 25"
 /lab_host="DH10B (phage resistant)"
 /clone_lib="Barstead colon HPLRB7"
 /notes="Organ: colon; Vector: pT73D-Pac (Pharmacia) with a modified polylinker; Site 1: EcoRI; Site 2: NotI; 1st strand cDNA was primed with a Not I - oligo(dT) primer [5' TGTTACGAATCTGAAGTGGAGCGCGCCCTTTTTTTTTTTTTTTTTTTT 3']; double-stranded cDNA was ligated to Eco RI adaptors [5' AATTACTAGTAT 3' and 5' ATTACTAGT 3'], digested with Not I and cloned into the Not I and Eco RI sites of the modified pT73 vector. Library constructed by Bob Barstead."

ORIGIN

Query Match 100.0%; Score 10; DB 1; Length 178;
 Best Local Similarity 100.0%; Pred. No. 1.1e+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 |||||
 Db 15 CGAACGTTTCG 6

RESULT 83

AW890544
 LOCUS QV4-NT0040-170400-175-a06 NT0040 Homo sapiens linear EST 24-MAY-2000
 DEFINITION QV4-NT0040-170400-175-a06 NT0040 Homo sapiens cDNA, mRNA sequence.
 ACCESSION AW890544
 VERSION AW890544.1 GI:8054749
 KEYWORDS EST.
 SOURCE Homo sapiens (human)
 ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 1 (bases 1 to 179)
 Dias Neto,E., Garcia Correa,R., Verjovski-Almeida,S., Briones,M.R., Nagai,M.A., da Silva,W. Jr., Zago,M.A., Bordin,S., Costa,F.F., Goldman,G.H., Carvalho,A.F., Matsukuma,A., Baia,G.S., Simpson,D.H., Brunstein,A., deOliveira,P.S., Bucher,P., Jongeneel,C.V., O'Hare,M.J., Soares,F., Brentani,R.R., Reis,L.F., de Souza,S.J. and Simpson,A.J.
 Shotgun sequencing of the human transcriptome with ORF expressed sequence tags
 Proc. Natl. Acad. Sci. U.S.A. 97 (7), 3451-3496 (2000)
 20202663
 10737800
 Contact: Simpson A.J.G.
 Laboratory of Cancer Genetics
 Ludwig Institute for Cancer Research
 Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP, Brazil
 Tel: +55-11-2704922
 Fax: +55-11-2707001
 Email: asimpson@ludwig.org.br
 This sequence was derived from the FAPESP/LICR Human Cancer Genome Project. This entry can be seen in the following URL
 (http://www.ludwig.org.br/scripts/gethtml2.pl?tl=et2=QV4-NT0040-170400-175-a06&t3=2000-04-17&t4=1)
 Seq primer: puc 18 forward
 High quality sequence start: 39
 High quality sequence stop: 179.
 Location/Qualifiers
 1. .179
 /organism="Homo sapiens"
 /mol_type="mRNA"
 /db_xref="taxon:9606"
 /dev_stage="Adult"
 /clone_lib="NT0040"
 /notes="Organ: nervous tumor; Vector: puc18; Site 1: SmaI; Site 2: SmaI; A mini-library was made by cloning products derived from ORESTES PCR (U.S. Letters Patent application No. 196,716 - Ludwig Institute for Cancer Research) profiles into the pUC 18 vector. Reverse transcription of tissue mRNA and cDNA amplification were performed under low stringency conditions."

TITLE Shotgun sequencing of the human transcriptome with ORF expressed sequence tags

JOURNAL Proc. Natl. Acad. Sci. U.S.A. 97 (7), 3451-3496 (2000)

MEDLINE 20202663

PUBMED 10737800

COMMENT

Contact: Simpson A.J.G.
 Laboratory of Cancer Genetics
 Ludwig Institute for Cancer Research
 Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP, Brazil
 Tel: +55-11-2704922
 Fax: +55-11-2707001
 Email: asimpson@ludwig.org.br
 This sequence was derived from the FAPESP/LICR Human Cancer Genome Project. This entry can be seen in the following URL
 (http://www.ludwig.org.br/scripts/gethtml2.pl?tl=et2=QV4-NT0040-170400-175-a06&t3=2000-04-17&t4=1)
 Seq primer: puc 18 forward
 High quality sequence start: 39
 High quality sequence stop: 179.
 Location/Qualifiers
 1. .179
 /organism="Homo sapiens"
 /mol_type="mRNA"
 /db_xref="taxon:9606"
 /dev_stage="Adult"
 /clone_lib="NT0040"
 /notes="Organ: nervous tumor; Vector: puc18; Site 1: SmaI; Site 2: SmaI; A mini-library was made by cloning products derived from ORESTES PCR (U.S. Letters Patent application No. 196,716 - Ludwig Institute for Cancer Research) profiles into the pUC 18 vector. Reverse transcription of tissue mRNA and cDNA amplification were performed under low stringency conditions."

FEATURES

source

1. .179
 /organism="Homo sapiens"
 /mol_type="mRNA"
 /db_xref="taxon:9606"
 /dev_stage="Adult"
 /clone_lib="NT0040"
 /notes="Organ: nervous tumor; Vector: puc18; Site 1: SmaI; Site 2: SmaI; A mini-library was made by cloning products derived from ORESTES PCR (U.S. Letters Patent application No. 196,716 - Ludwig Institute for Cancer Research) profiles into the pUC 18 vector. Reverse transcription of tissue mRNA and cDNA amplification were performed under low stringency conditions."

ORIGIN

Query Match 100.0%; Score 10; DB 2; Length 179;
 Best Local Similarity 100.0%; Pred. No. 1.1e+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

ORIGIN

Query Match 100.0%; Score 10; DB 2; Length 179;
 Best Local Similarity 100.0%; Pred. No. 1.1e+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 CGAACGTTTCG 10
 |||||
 Db 33 CGAACGTTTCG 42

RESULT 84

AW890544/c
 LOCUS QV4-NT0040-170400-175-a06 NT0040 Homo sapiens linear EST 24-MAY-2000
 DEFINITION QV4-NT0040-170400-175-a06 NT0040 Homo sapiens cDNA, mRNA sequence.
 ACCESSION AW890544
 VERSION AW890544.1 GI:8054749
 KEYWORDS EST.
 SOURCE Homo sapiens (human)
 ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 1 (bases 1 to 179)
 Dias Neto,E., Garcia Correa,R., Verjovski-Almeida,S., Briones,M.R., Nagai,M.A., da Silva,W. Jr., Zago,M.A., Bordin,S., Costa,F.F., Goldman,G.H., Carvalho,A.F., Matsukuma,A., Baia,G.S., Simpson,D.H., Brunstein,A., deOliveira,P.S., Bucher,P., Jongeneel,C.V., O'Hare,M.J., Soares,F., Brentani,R.R., Reis,L.F., de Souza,S.J. and Simpson,A.J.
 Shotgun sequencing of the human transcriptome with ORF expressed sequence tags
 Proc. Natl. Acad. Sci. U.S.A. 97 (7), 3491-3496 (2000)
 20202663
 10737800
 Contact: Simpson A.J.G.
 Laboratory of Cancer Genetics
 Ludwig Institute for Cancer Research
 Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP, Brazil
 Tel: +55-11-2704922
 Fax: +55-11-2707001
 Email: asimpson@ludwig.org.br
 This sequence was derived from the FAPESP/LICR Human Cancer Genome Project. This entry can be seen in the following URL
 (http://www.ludwig.org.br/scripts/gethtml2.pl?tl=et2=QV4-NT0040-170400-175-a06&t3=2000-04-17&t4=1)
 Seq primer: puc 18 forward
 High quality sequence start: 39
 High quality sequence stop: 179.
 Location/Qualifiers
 1. .179
 /organism="Homo sapiens"
 /mol_type="mRNA"
 /db_xref="taxon:9606"
 /dev_stage="Adult"
 /clone_lib="NT0040"
 /notes="Organ: nervous tumor; Vector: puc18; Site 1: SmaI; Site 2: SmaI; A mini-library was made by cloning products derived from ORESTES PCR (U.S. Letters Patent application No. 196,716 - Ludwig Institute for Cancer Research) profiles into the pUC 18 vector. Reverse transcription of tissue mRNA and cDNA amplification were performed under low stringency conditions."

TITLE

Shotgun sequencing of the human transcriptome with ORF expressed sequence tags

JOURNAL Proc. Natl. Acad. Sci. U.S.A. 97 (7), 3491-3496 (2000)

MEDLINE 20202663

PUBMED 10737800

COMMENT

Contact: Simpson A.J.G.
 Laboratory of Cancer Genetics
 Ludwig Institute for Cancer Research
 Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP, Brazil
 Tel: +55-11-2704922
 Fax: +55-11-2707001
 Email: asimpson@ludwig.org.br
 This sequence was derived from the FAPESP/LICR Human Cancer Genome Project. This entry can be seen in the following URL
 (http://www.ludwig.org.br/scripts/gethtml2.pl?tl=et2=QV4-NT0040-170400-175-a06&t3=2000-04-17&t4=1)
 Seq primer: puc 18 forward
 High quality sequence start: 39
 High quality sequence stop: 179.
 Location/Qualifiers
 1. .179
 /organism="Homo sapiens"
 /mol_type="mRNA"
 /db_xref="taxon:9606"
 /dev_stage="Adult"
 /clone_lib="NT0040"
 /notes="Organ: nervous tumor; Vector: puc18; Site 1: SmaI; Site 2: SmaI; A mini-library was made by cloning products derived from ORESTES PCR (U.S. Letters Patent application No. 196,716 - Ludwig Institute for Cancer Research) profiles into the pUC 18 vector. Reverse transcription of tissue mRNA and cDNA amplification were performed under low stringency conditions."

FEATURES

source

1. .179
 /organism="Homo sapiens"
 /mol_type="mRNA"
 /db_xref="taxon:9606"
 /dev_stage="Adult"
 /clone_lib="NT0040"
 /notes="Organ: nervous tumor; Vector: puc18; Site 1: SmaI; Site 2: SmaI; A mini-library was made by cloning products derived from ORESTES PCR (U.S. Letters Patent application No. 196,716 - Ludwig Institute for Cancer Research) profiles into the pUC 18 vector. Reverse transcription of tissue mRNA and cDNA amplification were performed under low stringency conditions."

ORIGIN

Query Match 100.0%; Score 10; DB 2; Length 179;
 Best Local Similarity 100.0%; Pred. No. 1.1e+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 Db 42 CGAACGTTTCG 33

RESULT 85
 BZ892989
 LOCUS HL10_0122 H1 pUC18 Library Halorubrum lacusprofundi genomic 5',
 DEFINITION genomic survey sequence.
 ACCESSION BZ892989
 VERSION BZ892989.1 GI:33343579
 KEYWORDS GSS.
 SOURCE Halorubrum lacusprofundi
 ORGANISM Halorubrum lacusprofundi
 Archaea; Euryarchaeota; Halobacteria; Halobacteriales;
 Halobacteriaceae; Halorubrum.
 REFERENCE 1 (bases 1 to 180)
 AUTHORS Goo, Y., Roach, J., Glusman, G., Baliga, N.S., Deutsch, K., Pan, M.,
 DasSarma, S., Ng, W.V. and Hood, L.
 TITLE Low-pass Sequencing for Microbial Comparative Genomics
 JOURNAL Unpublished (2003)
 COMMENT Contact: Goo Y
 Institute for Systems Biology
 1441 North 34th Street, Seattle, WA 98103, USA
 Tel: 206 732 1412
 Fax: 206 732 1299
 Email: ygoo@systemsbiology.org
 Seq primer: M13 Forward
 Class: shotgun.

FEATURES
 source
 1. .180
 /organism="Halorubrum lacusprofundi"
 /mol_type="genomic DNA"
 /strain="ATCC 49239"
 /db_xref="taxon:2247"
 /clone_lib="H1 pUC18 Library"
 /note="Vector: pUC18; Site 1: SmaI; A shotgun library was
 constructed from Halorubrum lacusprofundi genomic DNA
 using pUC18/SmaI/BAP plasmid"

ORIGIN
 Query Match 100.0%; Score 10; DB 8; Length 180;
 Best Local Similarity 100.0%; Pred. No. 1.1e+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 Db 149 CGAACGTTTCG 158

RESULT 86
 BZ892989/c
 LOCUS HL10_0122 H1 pUC18 Library Halorubrum lacusprofundi genomic 5',
 DEFINITION genomic survey sequence.
 ACCESSION BZ892989
 VERSION BZ892989.1 GI:33343579
 KEYWORDS GSS.
 SOURCE Halorubrum lacusprofundi
 ORGANISM Halorubrum lacusprofundi
 Archaea; Euryarchaeota; Halobacteria; Halobacteriales;
 Halobacteriaceae; Halorubrum.
 REFERENCE 1 (bases 1 to 180)
 AUTHORS Goo, Y., Roach, J., Glusman, G., Baliga, N.S., Deutsch, K., Pan, M.,
 DasSarma, S., Ng, W.V. and Hood, L.
 TITLE Low-pass Sequencing for Microbial Comparative Genomics
 JOURNAL Unpublished (2003)
 COMMENT Contact: Goo Y
 Institute for Systems Biology
 1441 North 34th Street, Seattle, WA 98103, USA
 Tel: 206 732 1412

Fax: 206 732 1299
 Email: ygoo@systemsbiology.org
 Seq primer: M13 Forward
 Class: shotgun.

FEATURES
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 1. .180
 /organism="Halorubrum lacusprofundi"
 /mol_type="genomic DNA"
 /strain="ATCC 49239"
 /db_xref="taxon:2247"
 /clone_lib="H1 pUC18 Library"
 /note="Vector: pUC18; Site 1: SmaI; A shotgun library was
 constructed from Halorubrum lacusprofundi genomic DNA
 using pUC18/SmaI/BAP plasmid"

ORIGIN
 Query Match 100.0%; Score 10; DB 8; Length 180;
 Best Local Similarity 100.0%; Pred. No. 1.1e+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 Db 158 CGAACGTTTCG 149

RESULT 87
 BX549081
 LOCUS BX549081 Glossina morsitans morsitans adult infected gut Glossina
 DEFINITION morsitans morsitans cDNA clone fse105907_glc, mRNA sequence.
 ACCESSION BX549081
 VERSION BX549081.1 GI:33299278
 KEYWORDS EST.
 SOURCE Glossina morsitans morsitans
 ORGANISM Glossina morsitans morsitans
 Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
 Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
 Hippoboscidae; Glossinidae; Glossina.
 REFERENCE 1 (bases 1 to 181)
 AUTHORS Lehane, M.J., Aksoy, S., Gibson, W., Kerkhoun, A., Berriman, M.,
 Hamilton, J., Soares, M.B., Bonaldo, M.F., Lehane, S. and Hall, N.
 TITLE Adult midgut expressed sequence tags from the tsetse fly Glossina
 morsitans morsitans and expression analysis of putative immune
 response genes
 JOURNAL Genome Biol. 4 (10), R63 (2003)
 MEDLINE 22881942
 PUBMED 14513198
 COMMENT Contact: Hall N
 Pathogen Sequencing Unit
 The Sanger Institute The Wellcome Trust Genome Campus
 Hinxton, Cambridge, CB10 1SA, UK
 Request for clones, please contact: Mike Lehane
 Prof. M.J. Lehane
 School of Biological Sciences,
 University of Wales,
 Bangor LL57 2UW
 All clones with suffix gic are reverse primer reads starting at 5'
 end of the cDNA all pic reads are from
 the 3' end.

FEATURES
 source
 1. .181
 /organism="Glossina morsitans morsitans"
 /mol_type="mRNA"
 /sub_species="morsitans"
 /db_xref="taxon:37546"
 /clone_lib="fse105907_glc"
 /tissue_type="adult infected gut"
 /clone_lib="Glossina morsitans morsitans adult infected
 gut"
 /note="country: Zimbabwe; EST from adult gut infected with
 T.brucei"

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Query Match      100.0%; Score 10; DB 5; Length 181;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 71 CGAACGTTTCG 80

RESULT 88
BX549081/c
LOCUS
DEFINITION BX549081 Glossina morsitans morsitans adult infected gut Glossina
morsitans morsitans cDNA clone Tse105g07_q1c, mRNA sequence.
ACCESSION BX549081
VERSION BX549081.1 GI:33299278
KEYWORDS EST.
SOURCE Glossina morsitans morsitans
ORGANISM Glossina morsitans morsitans
REFERENCE 1 181 bp mRNA linear EST 10-OCT-2003
AUTHORS Lehanon, M.J., Soares, M.B., Bonaldo, M.F., Lehanon, S. and Hall, N.
TITLE Adult midgut expressed sequence tags from the tsetse fly Glossina
morsitans morsitans and expression analysis of putative immune
response genes
JOURNAL Genome Biol. 4 (10), R63 (2003)
MEDLINE 22881942
PUBMED 14519198
COMMENT Contact: Hall N
Pathogen Sequencing Unit
The Sanger Institute The Wellcome Trust Genome Campus
Hinxton, Cambridge, CB10 1SA, UK
Request for clones, please contact: Mike Lehanon
Prof. M.J. Lehanon
School of Biological Sciences,
University of Wales,
Bangor LL57 2UW
All clones with suffix q1c are reverse primer reads starting at 5'
end of the cDNA all q1c reads are from
the 3' end.

FEATURES
source
1..181
Location/Qualifiers
/organism="Glossina morsitans morsitans"
/mol_type="mRNA"
/sub_species="morsitans"
/db_xref="taxon:37546"
/clone="Tse105g07_q1c"
/tissue_type="adult infected gut"
/clone_lib="Glossina morsitans morsitans adult infected
gut"
/note="Country: Zimbabwe; EST from adult gut infected with
T. brucei"

ORIGIN
Query Match      100.0%; Score 10; DB 5; Length 181;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 80 CGAACGTTTCG 71

RESULT 89
CD892110
LOCUS
DEFINITION CD892110 182 bp mRNA linear EST 14-JUL-2003
G118.119P15F010724 G118 Triticum aestivum cDNA clone G118119P15,
mRNA sequence.
ACCESSION CD892110
VERSION CD892110.1 GI:32662519
KEYWORDS EST.
SOURCE Triticum aestivum
ORGANISM Triticum aestivum
REFERENCE 1 182
AUTHORS Genoplante, a major partnership french program in plant genomics
TITLE Genoplante, a major partnership french program in plant genomics
JOURNAL Unpublished (2003)
COMMENT Contact: Genoplante
Genoplante
93, rue Henri Rochefort 91025 EVRY CEDEX France
Tel: 33 1 69 47 54 00
Fax: 33 1 69 47 54 10
This sequence has been generated in the framework of the french
plant genomics programme 'Genoplante' (http://www.genoplante.com
and http://genoplante-info.infobiogen.fr).

FEATURES
source
1..182
Location/Qualifiers
/organism="Triticum aestivum"
/mol_type="mRNA"
/cultivar="recital"
/db_xref="taxon:4565"
/clone="G118119P15"
/tissue_type="grain (118 degrees per day after
pollination)"

ORIGIN
Query Match      100.0%; Score 10; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 76 CGAACGTTTCG 85

RESULT 90
CD892110/c
LOCUS
DEFINITION CD892110 182 bp mRNA linear EST 14-JUL-2003
G118.119P15F010724 G118 Triticum aestivum cDNA clone G118119P15,
mRNA sequence.
ACCESSION CD892110
VERSION CD892110.1 GI:32662519
KEYWORDS EST.
SOURCE Triticum aestivum
ORGANISM Triticum aestivum
REFERENCE 1 182
AUTHORS Genoplante, a major partnership french program in plant genomics
TITLE Genoplante, a major partnership french program in plant genomics
JOURNAL Unpublished (2003)
COMMENT Contact: Genoplante
Genoplante
93, rue Henri Rochefort 91025 EVRY CEDEX France
Tel: 33 1 69 47 54 00
Fax: 33 1 69 47 54 10
This sequence has been generated in the framework of the french
plant genomics programme 'Genoplante' (http://www.genoplante.com
and http://genoplante-info.infobiogen.fr).

FEATURES
source
1..182
Location/Qualifiers
/organism="Triticum aestivum"
/mol_type="mRNA"
/cultivar="recital"
/db_xref="taxon:4565"
/clone="G118119P15"
/tissue_type="grain (118 degrees per day after
pollination)"

```

```

KEYWORDS
SOURCE Triticum aestivum (bread wheat)
ORGANISM Triticum aestivum
REFERENCE 1 182
AUTHORS Genoplante, a major partnership french program in plant genomics
TITLE Genoplante, a major partnership french program in plant genomics
JOURNAL Unpublished (2003)
COMMENT Contact: Genoplante
Genoplante
93, rue Henri Rochefort 91025 EVRY CEDEX France
Tel: 33 1 69 47 54 00
Fax: 33 1 69 47 54 10
This sequence has been generated in the framework of the french
plant genomics programme 'Genoplante' (http://www.genoplante.com
and http://genoplante-info.infobiogen.fr).

FEATURES
source
1..182
Location/Qualifiers
/organism="Triticum aestivum"
/mol_type="mRNA"
/cultivar="recital"
/db_xref="taxon:4565"
/clone="G118119P15"
/tissue_type="grain (118 degrees per day after
pollination)"

ORIGIN
Query Match      100.0%; Score 10; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 76 CGAACGTTTCG 85

RESULT 90
CD892110/c
LOCUS
DEFINITION CD892110 182 bp mRNA linear EST 14-JUL-2003
G118.119P15F010724 G118 Triticum aestivum cDNA clone G118119P15,
mRNA sequence.
ACCESSION CD892110
VERSION CD892110.1 GI:32662519
KEYWORDS EST.
SOURCE Triticum aestivum
ORGANISM Triticum aestivum
REFERENCE 1 182
AUTHORS Genoplante, a major partnership french program in plant genomics
TITLE Genoplante, a major partnership french program in plant genomics
JOURNAL Unpublished (2003)
COMMENT Contact: Genoplante
Genoplante
93, rue Henri Rochefort 91025 EVRY CEDEX France
Tel: 33 1 69 47 54 00
Fax: 33 1 69 47 54 10
This sequence has been generated in the framework of the french
plant genomics programme 'Genoplante' (http://www.genoplante.com
and http://genoplante-info.infobiogen.fr).

FEATURES
source
1..182
Location/Qualifiers
/organism="Triticum aestivum"
/mol_type="mRNA"
/cultivar="recital"
/db_xref="taxon:4565"
/clone="G118119P15"
/tissue_type="grain (118 degrees per day after
pollination)"

```

```

ORIGIN
Query Match      100.0%; Score 10; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 85 CGAACGTTTCG 76

/clone_lib="G118"

RESULT 91
BM031196
LOCUS      183 bp      mRNA      linear      EST 05-NOV-2001
DEFINITION 496534 MARC 2BOV Bos taurus cDNA 5', mRNA sequence.
ACCESSION  BM031196
VERSION     BM031196.1 GI:16744766
KEYWORDS   EST.
SOURCE     Bos taurus (cow)
ORGANISM   Bos taurus
            Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
            Bovinae; Bos.
REFERENCE  1 (bases 1 to 183)
AUTHORS   Smith,T.P.L., Grosse,W.M., Freking,B.A., Roberts,A.J., Stone,R.T.,
            Casas,E., Wray,J.E., White,J., Cho,J., Fahrenkrug,S.C.,
            Bennett,G.L., Heaton,M.P., Laegreid,W.W., Rohrer,G.A.,
            Chitko-McKown,C.G., Perte,G., Holt,I., Karamycheva,S., Liang,F.,
            Quackenbush,J. and Keefe,J.W.
TITLE     Sequence evaluation of four pooled-tissue normalized bovine cDNA
            libraries and construction of a gene index for cattle
JOURNAL   Genome Res. 11 (4), 626-630 (2001)
MEDLINE   21180013
PUBMED    11282978
COMMENT   Contact: Smith TPL
            USDA, ARS, US Meat Animal Research Center
            PO Box 166, Clay Center, NE 68933-0166, USA
            Tel: 402 762 4366
            Fax: 402 762 4390
            Email: smith@email.marc.usda.gov
            Single pass sequencing. Bases called and alt trimmed with phred
            v0.980904.e. Vector identified by cross_match with the -minscore 18
            and -minmatch 12 options.
PCR Primers
FORWARD: AGGAACAGCTATGACCAT
BACKWARD: GTTTCCAGTCACGACG
Plate: 131 row: C column: 15
Seq primer: ATTTAGGTGACACTATAG.
            Location/Qualifiers
                1..183
                /organism="Bos taurus"
                /mol_type="mRNA"
                /db_xref="taxon:9913"
                /tissue_type="pooled"
                /lab_host="DH10B"
                /clone_lib="MARC 2BOV"
                /note="Vector: pCMV SPORT6; Site 1: NotI; Site 2: SalI;
                Library made from pooled tissue from testis, thymus,
                semitendinosus muscle, longissimus muscle, pancreas,
                adrenal, and endometrium."

FEATURES
            source
            Query Match      100.0%; Score 10; DB 4; Length 183;
            Best Local Similarity 100.0%; Pred. No. 1.1e+04;
            Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

            Qy 1 CGAACGTTTCG 10
            Db 51 CGAACGTTTCG 42

ORIGIN
Query Match      100.0%; Score 10; DB 4; Length 183;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 42 CGAACGTTTCG 51

RESULT 92
BM031196
LOCUS      186 bp      mRNA      linear      EST 26-NOV-2002
DEFINITION wkm2c.pk006.f8 wkm2c Triticum aestivum cDNA clone wkm2c.pk006.f8 5',
            end, mRNA sequence.
ACCESSION  CA701571
VERSION     CA701571.1 GI:25423364
KEYWORDS   EST.
SOURCE     Triticum aestivum (bread wheat)
ORGANISM   Triticum aestivum
            Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
            Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
            Pooideae; Triticeae; Triticum.
REFERENCE  1 (bases 1 to 186)

```

AUTHORS
Tingey,S.V., Powell,W., Wolters,P., Dolan,M., Hainey,C., Yuan,Z.,
Miao,G., Caraher,N. and Hanafey,M.K.

TITLE
DuPont Wheat cDNA Sequence

JOURNAL
Unpublished (2002)

COMMENT
Contact: Scott V. Tingey
Crop Genetics
E. I. DuPont de Nemours and Company
1 Innovation Way, P.O. Box 6104, Newark, DE 19714-6104, USA
Tel: 302-631-2602
Fax: 302-631-2607
Email: Scott.V.Tingey@USA.dupont.com
Seq primer: M13.

FEATURES
source
Location/Qualifiers
1..186
/organism="Triticum aestivum"
/mol_type="mRNA"
/cultivar="hard red spring"
/db_xref="taxon:4565"
/clones="wkm2c.pk006.f8"
/tissue_type="kernel"
/lab_host="DH10B"
/clone_lib="wkm2c"
/notes="Site 1: EcoRI; Site 2: XhoI; Wheat (Triticum
aestivum L.) kernel malted 175 hours at 4 C"

ORIGIN
Query Match 100.0%; Score 10; DB 6; Length 186;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
|||||
Db 120 CGAACGTTTCG 129

RESULT 94
CA701571/c

LOCUS
CA701571 186 bp mRNA linear EST 26-NOV-2002

DEFINITION
wkm2c.pk006.f8 wkm2c Triticum aestivum cDNA clone wkm2c.pk006.f8 5'
end, mRNA sequence.

ACCESSION
CA701571

VERSION
CA701571.1 GI:25423364

KEYWORDS
EST.

SOURCE
Triticum aestivum (bread wheat)

ORGANISM
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
Pooideae; Triticeae; Triticum.
1 (bases 1 to 186)

REFERENCE
Tingey,S.V., Powell,W., Wolters,P., Dolan,M., Hainey,C., Yuan,Z.,
Miao,G., Caraher,N. and Hanafey,M.K.

AUTHORS
DuPont Wheat cDNA Sequence

TITLE
Unpublished (2002)

JOURNAL
Unpublished (2002)

COMMENT
Contact: Scott V. Tingey
Crop Genetics
E. I. DuPont de Nemours and Company
1 Innovation Way, P.O. Box 6104, Newark, DE 19714-6104, USA
Tel: 302-631-2602
Fax: 302-631-2607
Email: Scott.V.Tingey@USA.dupont.com
Seq primer: M13.

FEATURES
source
Location/Qualifiers
1..186
/organism="Triticum aestivum"
/mol_type="mRNA"
/cultivar="hard red spring"
/db_xref="taxon:4565"
/clones="wkm2c.pk006.f8"
/tissue_type="kernel"
/lab_host="DH10B"
/clone_lib="wkm2c"
/notes="Site 1: EcoRI; Site 2: XhoI; Wheat (Triticum
aestivum L.) kernel malted 175 hours at 4 C"

ORIGIN
Query Match 100.0%; Score 10; DB 6; Length 186;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
|||||
Db 129 CGAACGTTTCG 120

RESULT 95
CNS03DYS

LOCUS
CNS03DYS 186 bp DNA linear GSS 01-SEP-2000

DEFINITION
Tetraodon nigroviridis genome survey sequence PUC-Ori end of clone
019015 of library G from Tetraodon nigroviridis, genomic survey
sequence.

ACCESSION
AL239724

VERSION
AL239724.1 GI:7898859

KEYWORDS
GSS: genome survey sequence.

SOURCE
Tetraodon nigroviridis

ORGANISM
Tetraodon nigroviridis
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Tetraodontiformes;
Tetraodontoidea; Tetraodontidae; Tetraodon.

REFERENCE
1 Roest Crolius,H., Jaillon,O., Dasilva,C., Bouneau,L., Fisher,C.,
Bernot,A., Fizanes,C., Wincker,P., Brottier,P., Quetier,F.,
Saurin,W. and Weissenbach,J.
Estimate of human gene number provided by genome-wide analysis
using Tetraodon nigroviridis DNA sequence
Nat. Genet. 25 (2), 235-238 (2000)

TITLE
Estimate of human gene number provided by genome-wide analysis
using Tetraodon nigroviridis DNA sequence

JOURNAL
MEDLINE 20296633

PUBMED
10835645

REFERENCE
2

AUTHORS
Roest Crolius,H., Jaillon,O., Dasilva,C., Ozouf-Costaz,C.,
Fizanes,C., Fischer,C., Bouneau,L., Billault,A., Quetier,F.,
Saurin,W., Bernot,A. and Weissenbach,J.
Characterization and repeat analysis of the compact genome of the
freshwater pufferfish Tetraodon nigroviridis
Genome Res. 10 (7), 939-949 (2000)

TITLE
Characterization and repeat analysis of the compact genome of the
freshwater pufferfish Tetraodon nigroviridis

JOURNAL
MEDLINE 20359837

PUBMED
10899143

REFERENCE
3 (bases 1 to 186)

AUTHORS
Genoscope.

TITLE
Direct Submission

JOURNAL
Submitted (12-APR-2000) Genoscope - Centre National de Sequencage :
BP 191 91006 EVRY cedex - FRANCE (E-mail : seqref@genoscope.cns.fr
- Web : www.genoscope.cns.fr)

COMMENT
This sequence is a single read and was generated as part of a large
scale clone-end sequencing project of the Tetraodon nigroviridis
genome. For more information, please take a look at
http://www.genoscope.cns.fr/Tetraodon.

FEATURES
source
Location/Qualifiers
1..186
/organism="Tetraodon nigroviridis"
/mol_type="genomic DNA"
/db_xref="taxon:99883"
/clone="019015"
/clone_lib="G"
/notes="Genoscope sequence ID : COBG019AH08SP1-end ;
PUC-Ori"

ORIGIN
Query Match 100.0%; Score 10; DB 9; Length 186;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
|||||
Db 18 CGAACGTTTCG 27

Martin, J., Wylie, T., Underwood, K., Steptoe, M., Theising, B., Allen, M., Bowers, Y., Person, B., Swaller, T., Gibbons, M., Pape, D., Harvey, N., Schurk, R., Ritter, E., Kohn, S., Florence, N., Shin, T., Jackson, Y., Cardenas, M., McCann, R., Waterston, R., Wilson, R. and Sibley, D.

WashU-Merck Bimeria tenella project
Unpublished (1999)
Contact: David Sibley, Ph.D.
WashU-Merck Bimeria tenella project
Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108, USA
Tel: 314 286 1800
Fax: 314 286 1810
Email: est@watson.wustl.edu

Contact David Sibley (toxoest@borcim.wustl.edu) for further information relating to organism, libraries, or clone availability.
Possible reversed clone: similarity on wrong strand
Seq primer: -40RP from Gibco
High quality sequence stop: 1.

FEATURES

source

```
1..190
/organism="Eimeria tenella"
/mol_type="mRNA"
/strain="LS18"
/db_xref="taxon:5802"
/dev_stage="Merozoite"
/lab_host="SOLR E. coli"
/clone_lib="Eimeria MS-6 Merozoite stage"
/notes="Vector: Bluescript SK-; Site 1: EcoRI; Site 2: XhoI; Merozoites were obtained from ceacal scrapings of chickens infected with E. tenella. The library may contain a small percentage of host or bacterial contaminants. cDNA was synthesized from poly mRNA using an oligo-dT primer containing a XhoI site. Following second strand synthesis, EcoRI adapters were ligated to the cDNA and products were size-selected on Sephacryl S500. cDNAs were digested with EcoRI/XhoI and cloned into lambda Zap II (Stratagene). Clones were converted to phagemids by mass excision using ExAssist helper phage and SOLR cells (Stratagene). Insert sizes range from 0.7-1.5 kb."
```

ORIGIN

```
Query Match      100.0%; Score 10; DB 1; Length 190;
Best Local Similarity 100.0%; Pred. NO. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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Qy 1 CGAACGTTTCG 10

|||||

Db 103 CGAACGTTTCG 94

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RESULT 99
BF556292          192 bp mRNA linear EST 12-DEC-2000
LOCUS            UI-R-AI-em-h-11-0-UI.r1 UI-R-AI Rattus norvegicus cDNA clone
DEFINITION       UI-R-AI-em-h-11-0-UI 5', mRNA sequence.
ACCESSION        BF556292
VERSION          BF556292.1 GI:11666016
KEYWORDS         EST.
SOURCE           Rattus norvegicus (Norway rat)
ORGANISM         Rattus norvegicus
Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
Rattus.
```

```
REFERENCE
1 (bases 1 to 192)
Bonaldo, M.F., Lennon, G. and Soares, M.B.
Normalization and subtraction: two approaches to facilitate gene
discovery
JOURNAL          Genome Res. 6 (9), 791-806 (1996)
MEDLINE          97044477
PUBMED           8889548
COMMENT          Contact: Soares, MB
```

Coordinated Laboratory for Computational Genomics
University of Iowa
375 Newton Road, 4156 MEBRF, Iowa City, IA 52242, USA
Tel: 319 335 8250
Fax: 319 335 9565
Email: bento-soares@uiowa.edu

cDNA Library Preparation: M.B. Soares Lab Clone Distribution:
clones will be available through Research Genetics (www.resgen.com)
This clone is also available through the I.M.A.G.E. Consortium at
LNL (info@image.llnl.gov). IMAGE ID= 1771558
Seq primer: M13 Forward.

FEATURES

source

```
1..192
/organism="Rattus norvegicus"
/mol_type="mRNA"
/strain="Sprague-Dawley"
/db_xref="taxon:10116"
/clone="UI-R-AI-em-h-11-0-UI"
/dev_stage="adult"
/lab_host="DH10B (Life Technologies)"
/clone_lib="UI-R-AI"
/notes="Vector: pT73D-Pac (Pharmacia) with a modified polylinker; Site 1: Not I; Site 2: Eco RI; The UI-R-AI library is a subtracted library derived from the UI-R-A0 library. The UI-R-A0 library consisted of a mixture of individually tagged normalized libraries constructed from rat placenta, adult lung, brain, liver, kidney, heart, spleen, ovary, and muscle. The tag is a string of 3-5 nucleotides present between the Not I site and the oligo-dT track which allows identification of the library of origin of a clone within the mixture. The subtracted library (UI-R-AI) was constructed as follows: PCR amplified cDNA inserts from a pool of approximately 3,840 UI-R-A0 clones from which 3' ESTs had been derived was used as a driver in a hybridization with the UI-R-A0 library in the form of single-stranded circles. The remaining single-stranded circles (subtracted library) was purified by hydroxyapatite column chromatography, converted to double-stranded circles and electroporated into DH10B bacteria (Life Technologies) to generate the UI-R-AI library. This procedure has been previously described (Bonaldo, Lennon and Soares, Genome Research 6: 791-806, 1996)"
```

ORIGIN

```
Query Match      100.0%; Score 10; DB 2; Length 192;
Best Local Similarity 100.0%; Pred. NO. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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Qy 1 CGAACGTTTCG 10

|||||

Db 131 CGAACGTTTCG 140

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RESULT 100
BF556292/c       192 bp mRNA linear EST 12-DEC-2000
LOCUS            UI-R-AI-em-h-11-0-UI.r1 UI-R-AI Rattus norvegicus cDNA clone
DEFINITION       UI-R-AI-em-h-11-0-UI 5', mRNA sequence.
ACCESSION        BF556292
VERSION          BF556292.1 GI:11666016
KEYWORDS         EST.
SOURCE           Rattus norvegicus (Norway rat)
ORGANISM         Rattus norvegicus
Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
Rattus.
```

```
REFERENCE
1 (bases 1 to 192)
Bonaldo, M.F., Lennon, G. and Soares, M.B.
Normalization and subtraction: two approaches to facilitate gene
discovery
JOURNAL          Genome Res. 6 (9), 791-806 (1996)
MEDLINE          97044477
```


PUBMED
COMMENT

8889548

Contact: Soares, MB
Coordinated Laboratory for Computational Genomics
University of Iowa
375 Newton Road, 4156 MEBRF, Iowa City, IA 52242, USA
Tel: 319 335 8250
Fax: 319 335 9565
Email: bento-soares@uiowa.edu

cDNA Library Preparation: M.B. Soares Lab Clone distribution:
clones will be available through Research Genetics (www.resgen.com)
This clone is also available through the I.M.A.G.E. Consortium at
LLNL (linc@image.llnl.gov). IMAGE ID= 1771558
Seq primer: M3 Forward.

FEATURES
source

Location/Qualifiers

```

1. .192
/organism="Rattus norvegicus"
/mol_type="mRNA"
/strain="Sprague-Dawley"
/db_xref="taxon:10116"
/clone="UI-R-A1-em-h-11-0-UI"
/dev_stage="adult"
/lab_host="DH10B (Life Technologies)"
/clone_lib="UI-R-A1"
/note="Vector: pT73D-Pac (Pharmacia) with a modified
polylinker; Site 1: Not 1; Site 2: Eco RI; The UI-R-A1
library is a subtracted library derived from the UI-R-A0
library. The UI-R-A0 library consisted of a mixture of
individually tagged normalized libraries constructed from
rat placenta, adult lung, brain, liver, kidney, heart,
spleen, ovary, and muscle. The tag is a string of 3-5
nucleotides present between the Not I site and the
oligo-dr track which allows identification of the library
of origin of a clone within the mixture. The subtracted
library (UI-R-A1) was constructed as follows: PCR
amplified cDNA inserts from a pool of approximately 3,840
UI-R-A0 clones from which 3' ESTs had been derived was
used as a driver in a hybridization with the UI-R-A0
library in the form of single-stranded circles. The
remaining single-stranded circles (subtracted library) was
purified by hydroxyapatite column chromatography,
converted to double-stranded circles and electroporated
into DH10B bacteria (Life Technologies) to generate the
UI-R-A1 library. This procedure has been previously
described (Bonaldo, Lennon and Soares, Genome Research 6:
791-806, 1996)"

```

ORIGIN

Query Match 100.0%; Score 10; DB 2; Length 192;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
|
|
|
|
|
|
|
|
|
|
Db 140 CGAACGTTTCG 131

Search completed: June 30, 2005, 02:04:38
Job time : 1724 secs

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GenCore version 5.1.6
Copyright (c) 1993 - 2005 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: June 29, 2005, 16:54:07 ; Search time 857.5 Seconds

(without alignments)
565.075 Million cell updates/sec

Title: US-10-033-243-77

Perfect score: 10

Sequence: 1 cgaacgttcg 10

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 4708233 seqs, 24227607955 residues

Total number of hits satisfying chosen parameters: 9416466

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 100 summaries

Database :

GenEmbl.*

1: gb_ba.*

2: gb_htg.*

3: gb_in.*

4: gb_on.*

5: gb_ov.*

6: gb_pat.*

7: gb_ph.*

8: gb_pl.*

9: gb_pr.*

10: gb_ro.*

11: gb_sts.*

12: gb_sy.*

13: gb_un.*

14: gb_vi.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | Query Match | Length | ID | Description |
|------------|-------|-------------|--------|----|-------------------|
| 1 | 10 | 100.0 | 10 | 6 | AX592387 Sequence |
| C 2 | 10 | 100.0 | 10 | 6 | AX592387 Sequence |
| 3 | 10 | 100.0 | 11 | 6 | AX592412 Sequence |
| C 4 | 10 | 100.0 | 11 | 6 | AX592412 Sequence |
| 5 | 10 | 100.0 | 13 | 6 | AX592407 Sequence |
| C 6 | 10 | 100.0 | 13 | 6 | AX592407 Sequence |
| 7 | 10 | 100.0 | 13 | 6 | AX592409 Sequence |
| C 8 | 10 | 100.0 | 13 | 6 | AX592409 Sequence |
| 9 | 10 | 100.0 | 14 | 6 | AX592408 Sequence |
| C 10 | 10 | 100.0 | 14 | 6 | AX592408 Sequence |
| 11 | 10 | 100.0 | 16 | 6 | AX592321 Sequence |
| C 12 | 10 | 100.0 | 16 | 6 | AX592321 Sequence |
| 13 | 10 | 100.0 | 18 | 6 | AX592324 Sequence |
| C 14 | 10 | 100.0 | 18 | 6 | AX592324 Sequence |
| 15 | 10 | 100.0 | 19 | 6 | AX592329 Sequence |
| C 16 | 10 | 100.0 | 19 | 6 | AX592329 Sequence |
| 17 | 10 | 100.0 | 20 | 6 | AX296868 Sequence |
| C 18 | 10 | 100.0 | 20 | 6 | AX296868 Sequence |
| 19 | 10 | 100.0 | 21 | 6 | AX592442 Sequence |

93 10 100.0 249 9 HS165A6F Z57132 H.sapiens C
 c 94 10 100.0 249 9 HS165A6F Z57132 H.sapiens C
 95 10 100.0 249 9 HS285551 Z85551 H.sapiens B
 c 96 10 100.0 249 9 HS285551 Z85551 H.sapiens B
 97 10 100.0 250 9 HSA347589 AJ347589 Homo sapi
 c 98 10 100.0 250 9 HSA347589 AJ347589 Homo sapi
 99 10 100.0 254 9 AF303897 AF303897 Homo sapi
 c 100 10 100.0 254 9 AF303897 AF303897 Homo sapi

ALIGNMENTS

RESULT 1
 AX592387
 LOCUS AX592387 10 bp DNA linear PAT 27-JAN-2003
 DEFINITION Sequence 77 from Patent WO02052002.
 ACCESSION AX592387
 VERSION AX592387.1 GI:27950489
 KEYWORDS
 SOURCE synthetic construct
 ORGANISM other sequences; artificial sequences.

REFERENCE 1
 AUTHORS Fearon,K.L. and Dina,D.
 TITLE Immunomodulatory polynucleotides and methods of using the same
 JOURNAL Patent: WO 02052002-A 77 04-JUL-2002;
 DYNAX Technologies Corporation (US)
 FEATURES
 source
 1. .10
 /organism="synthetic construct"
 /mol_type="unassigned DNA"
 /db_xref="taxon:32630"
 /note="Polynucleotide containing CG"

ORIGIN

Query Match 100.0%; Score 10; DB 6; Length 10;
 Best Local Similarity 100.0%; Pred. No. 2.3e+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 |||||
 Db 1 CGAACGTTTCG 10

RESULT 2
 AX592387/c
 LOCUS AX592387 10 bp DNA linear PAT 27-JAN-2003
 DEFINITION Sequence 77 from Patent WO02052002.
 ACCESSION AX592387
 VERSION AX592387.1 GI:27950489
 KEYWORDS
 SOURCE synthetic construct
 ORGANISM other sequences; artificial sequences.

REFERENCE 1
 AUTHORS Fearon,K.L. and Dina,D.
 TITLE Immunomodulatory polynucleotides and methods of using the same
 JOURNAL Patent: WO 02052002-A 77 04-JUL-2002;
 DYNAX Technologies Corporation (US)
 FEATURES
 source
 1. .10
 /organism="synthetic construct"
 /mol_type="unassigned DNA"
 /db_xref="taxon:32630"
 /note="Polynucleotide containing CG"

ORIGIN

Query Match 100.0%; Score 10; DB 6; Length 10;
 Best Local Similarity 100.0%; Pred. No. 2.3e+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

Db 10 CGAACGTTTCG 10
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RESULT 3
 AX592412
 LOCUS AX592412 11 bp DNA linear PAT 27-JAN-2003
 DEFINITION Sequence 102 from Patent WO02052002.
 ACCESSION AX592412
 VERSION AX592412.1 GI:27950514
 KEYWORDS
 SOURCE synthetic construct
 ORGANISM other sequences; artificial sequences.

REFERENCE 1
 AUTHORS Fearon,K.L. and Dina,D.
 TITLE Immunomodulatory polynucleotides and methods of using the same
 JOURNAL Patent: WO 02052002-A 102 04-JUL-2002;
 DYNAX Technologies Corporation (US)
 FEATURES
 source
 1. .11
 /organism="synthetic construct"
 /mol_type="unassigned DNA"
 /db_xref="taxon:32630"
 /note="Polynucleotide containing CG"

ORIGIN

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 Best Local Similarity 100.0%; Pred. No. 2.3e+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 |||||
 Db 2 CGAACGTTTCG 11

RESULT 4
 AX592412/c
 LOCUS AX592412 11 bp DNA linear PAT 27-JAN-2003
 DEFINITION Sequence 102 from Patent WO02052002.
 ACCESSION AX592412
 VERSION AX592412.1 GI:27950514
 KEYWORDS
 SOURCE synthetic construct
 ORGANISM other sequences; artificial sequences.

REFERENCE 1
 AUTHORS Fearon,K.L. and Dina,D.
 TITLE Immunomodulatory polynucleotides and methods of using the same
 JOURNAL Patent: WO 02052002-A 102 04-JUL-2002;
 DYNAX Technologies Corporation (US)
 FEATURES
 source
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 /mol_type="unassigned DNA"
 /db_xref="taxon:32630"
 /note="Polynucleotide containing CG"

ORIGIN
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 Best Local Similarity 100.0%; Pred. No. 2.3e+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 |||||
 Db 11 CGAACGTTTCG 2

RESULT 5
 AX592407
 LOCUS AX592407 13 bp DNA linear PAT 27-JAN-2003
 DEFINITION Sequence 97 from Patent WO02052002.
 ACCESSION AX592407

/db_xref="taxon:32630"
/note="Polynucleotide containing CG"

ORIGIN

Query Match 100.0%; Score 10; DB 6; Length 14;
Best Local Similarity 100.0%; Pred. No. 2.3e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
|||||
Db 5 CGAACGTTTCG 14

RESULT 10

AX592408/c
LOCUS AX592408 14 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 98 from Patent WO02052002.
ACCESSION AX592408
VERSION AX592408.1 GI:27950510
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
other sequences; artificial sequences.

REFERENCE 1

AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 98 04-JUL-2002;
DynaVax Technologies Corporation (US)
FEATURES Location/Qualifiers

source
1..14
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Polynucleotide containing CG"

ORIGIN

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Best Local Similarity 100.0%; Pred. No. 2.3e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
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Db 14 CGAACGTTTCG 5

RESULT 11

AX592321
LOCUS AX592321 16 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 11 from Patent WO02052002.
ACCESSION AX592321
VERSION AX592321.1 GI:27950423
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
other sequences; artificial sequences.

REFERENCE 1

AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 11 04-JUL-2002;
DynaVax Technologies Corporation (US)
FEATURES Location/Qualifiers

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/db_xref="taxon:32630"
/note="Polynucleotide containing CG"

ORIGIN

Query Match 100.0%; Score 10; DB 6; Length 16;
Best Local Similarity 100.0%; Pred. No. 2.3e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

|||||
Db 5 CGAACGTTTCG 14

RESULT 12

AX592321/c
LOCUS AX592321 16 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 11 from Patent WO02052002.
ACCESSION AX592321
VERSION AX592321.1 GI:27950423
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
other sequences; artificial sequences.

REFERENCE 1

AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 11 04-JUL-2002;
DynaVax Technologies Corporation (US)
FEATURES Location/Qualifiers

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/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Polynucleotide containing CG"

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Query Match 100.0%; Score 10; DB 6; Length 16;
Best Local Similarity 100.0%; Pred. No. 2.3e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
|||||
Db 14 CGAACGTTTCG 5

RESULT 13

AX592324
LOCUS AX592324 18 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 14 from Patent WO02052002.
ACCESSION AX592324
VERSION AX592324.1 GI:27950426
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
other sequences; artificial sequences.

REFERENCE 1

AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 14 04-JUL-2002;
DynaVax Technologies Corporation (US)
FEATURES Location/Qualifiers

source
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/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Polynucleotide containing CG"

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Query Match 100.0%; Score 10; DB 6; Length 18;
Best Local Similarity 100.0%; Pred. No. 2.4e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
|||||
Db 4 CGAACGTTTCG 13

RESULT 14

AX592324/c
LOCUS AX592324 18 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 14 from Patent WO02052002.
ACCESSION AX592324

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VERSION AX592324.1 GI:27950426
KEYWORDS
SOURCE
ORGANISM synthetic construct
other sequences; artificial sequences.
REFERENCE 1
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 14 04-JUL-2002;
Dynamax Technologies Corporation (US)
FEATURES source
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/db_xref="taxon:32630"
/notes="Polynucleotide containing CG"
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Best Local Similarity 100.0%; Pred. No. 2.4e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
Db 13 CGAACGTTTCG 4
RESULT 15
AX592329
LOCUS AX592329 19 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 19 from Patent WO02052002.
ACCESSION AX592329
VERSION AX592329.1 GI:27950431
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
other sequences; artificial sequences.
REFERENCE 1
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 19 04-JUL-2002;
Dynamax Technologies Corporation (US)
FEATURES source
1. .19
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/db_xref="taxon:32630"
/notes="Polynucleotide containing CG"
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Best Local Similarity 100.0%; Pred. No. 2.4e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
Db 5 CGAACGTTTCG 14
RESULT 16
AX592329/c
LOCUS AX592329 19 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 19 from Patent WO02052002.
ACCESSION AX592329
VERSION AX592329.1 GI:27950431
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
other sequences; artificial sequences.
REFERENCE 1
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 19 04-JUL-2002;
Dynamax Technologies Corporation (US)
FEATURES source
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Best Local Similarity 100.0%; Pred. No. 2.4e+04;
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Qy 1 CGAACGTTTCG 10
Db 5 CGAACGTTTCG 14
RESULT 17
AX296868
LOCUS AX296868 20 bp DNA linear PAT 21-NOV-2001
DEFINITION Sequence 8630 from Patent WO0179548.
ACCESSION AX296868
VERSION AX296868.1 GI:17058557
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
other sequences; artificial sequences.
REFERENCE 1
AUTHORS Barany,F., Zirvi,M., Gerry,N.P., Favis,R. and Kliman,R.
TITLE Method of designing addressable array for detection of nucleic acid
sequence differences using ligase detection reaction
JOURNAL Patent: WO 0179548-A 8630 25-OCT-2001;
CORNELL RESEARCH FOUNDATION, INC. (US)
FEATURES source
1. .20
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/db_xref="taxon:32630"
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Best Local Similarity 100.0%; Pred. No. 2.4e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
Db 9 CGAACGTTTCG 18
RESULT 18
AX296868/c
LOCUS AX296868 20 bp DNA linear PAT 21-NOV-2001
DEFINITION Sequence 8630 from Patent WO0179548.
ACCESSION AX296868
VERSION AX296868.1 GI:17058557
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
other sequences; artificial sequences.
REFERENCE 1
AUTHORS Barany,F., Zirvi,M., Gerry,N.P., Favis,R. and Kliman,R.
TITLE Method of designing addressable array for detection of nucleic acid
sequence differences using ligase detection reaction
JOURNAL Patent: WO 0179548-A 8630 25-OCT-2001;
CORNELL RESEARCH FOUNDATION, INC. (US)
FEATURES source
1. .20
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/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/notes="Hypothetical Probe Sequence"

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ORIGIN

Query Match 100.0%; Score 10; DB 6; Length 20;
 Best Local Similarity 100.0%; Pred. No. 2.4e+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 |||||
 Db 18 CGAACGTTTCG 9

RESULT 19

AX592442
 LOCUS AX592442 21 bp DNA linear PAT 27-JAN-2003
 DEFINITION Sequence 132 from Patent WO02052002.
 ACCESSION AX592442
 VERSION AX592442.1 GI:27950544
 KEYWORDS synthetic construct
 SOURCE synthetic construct
 ORGANISM other sequences; artificial sequences.

REFERENCE 1

AUTHORS Fearon,K.L. and Dina,D.
 TITLE Immunomodulatory polynucleotides and methods of using the same
 JOURNAL Patent: WO 02052002-A 132 04-JUL-2002;
 DYNAX Technologies Corporation (US)

FEATURES

source
 1. .21
 /organism="synthetic construct"
 /mol_type="unassigned DNA"
 /db_xref="taxon:32630"
 /note="Polynucleotide containing CG"

ORIGIN

Query Match 100.0%; Score 10; DB 6; Length 21;
 Best Local Similarity 100.0%; Pred. No. 2.4e+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 |||||
 Db 5 CGAACGTTTCG 14

RESULT 20

AX592442/c
 LOCUS AX592442 21 bp DNA linear PAT 27-JAN-2003
 DEFINITION Sequence 132 from Patent WO02052002.
 ACCESSION AX592442
 VERSION AX592442.1 GI:27950544
 KEYWORDS synthetic construct
 SOURCE synthetic construct
 ORGANISM other sequences; artificial sequences.

REFERENCE 1

AUTHORS Fearon,K.L. and Dina,D.
 TITLE Immunomodulatory polynucleotides and methods of using the same
 JOURNAL Patent: WO 02052002-A 132 04-JUL-2002;
 DYNAX Technologies Corporation (US)

FEATURES

source
 1. .21
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 /note="Polynucleotide containing CG"

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 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 |||||
 Db 14 CGAACGTTTCG 5

RESULT 21

AR222419
 LOCUS AR222419 22 bp DNA linear PAT 26-SEP-2002
 DEFINITION Sequence 18 from patent US 6429292.
 ACCESSION AR222419
 VERSION AR222419.1 GI:23329932
 KEYWORDS Unknown.
 SOURCE Unknown.
 ORGANISM Unclassified.

REFERENCE 1 (bases 1 to 22)

AUTHORS Jefferson,R.A., Wilson,K.J. and Leader,M.
 TITLE Glucuronide repressors and uses thereof
 JOURNAL Patent: US 6429292-A 18 06-AUG-2002;
 FEATURES Location/Qualifiers
 source
 1. .22
 /organism="unknown"
 /mol_type="genomic DNA"

ORIGIN

Query Match 100.0%; Score 10; DB 6; Length 22;
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 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 |||||
 Db 9 CGAACGTTTCG 18

RESULT 22

AR222419/c
 LOCUS AR222419 22 bp DNA linear PAT 26-SEP-2002
 DEFINITION Sequence 18 from patent US 6429292.
 ACCESSION AR222419
 VERSION AR222419.1 GI:23329932
 KEYWORDS Unknown.
 SOURCE Unknown.
 ORGANISM Unclassified.

REFERENCE 1 (bases 1 to 22)

AUTHORS Jefferson,R.A., Wilson,K.J. and Leader,M.
 TITLE Glucuronide repressors and uses thereof
 JOURNAL Patent: US 6429292-A 18 06-AUG-2002;
 FEATURES Location/Qualifiers
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 1. .22
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ORIGIN

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Qy 1 CGAACGTTTCG 10
 |||||
 Db 18 CGAACGTTTCG 9

RESULT 23

AR437285
 LOCUS AR437285 22 bp DNA linear PAT 18-DEC-2003
 DEFINITION Sequence 18 from patent US 6659764.
 ACCESSION AR437285
 VERSION AR437285.1 GI:40202187
 KEYWORDS Unknown.
 SOURCE Unknown.
 ORGANISM Unclassified.

REFERENCE 1 (bases 1 to 22)

AUTHORS Xu,W.
 TITLE Palm actuation lighter


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JOURNAL Patent: US 6659764-A 18 09-DEC-2003;
FEATURES Location/Qualifiers
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/organism="unknown"
/mol_type="genomic DNA"

ORIGIN
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Best Local Similarity 100.0%; Pred. No. 2.4e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 9 CGAACGTTTCG 18

RESULT 24
AR437285/c
LOCUS AR437285 22 bp DNA linear PAT 18-DEC-2003
DEFINITION Sequence 18 from patent US 6659764.
ACCESSION AR437285
VERSION AR437285.1 GI:40202187
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE
1 (bases 1 to 22)
AUTHORS Xu, W.
TITLE Palm actuation lighter
JOURNAL Patent: US 6659764-A 18 09-DEC-2003;
FEATURES Location/Qualifiers
source
1. .22
/organism="unknown"
/mol_type="genomic DNA"

ORIGIN
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Best Local Similarity 100.0%; Pred. No. 2.4e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 18 CGAACGTTTCG 9

RESULT 25
AX592332
LOCUS AX592332 22 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 22 from Patent WO02052002.
ACCESSION AX592332
VERSION AX592332.1 GI:27950434
KEYWORDS
SOURCE synthetic construct
synthetic construct
other sequences; artificial sequences.
REFERENCE
1
AUTHORS Fearon, K.L. and Dina, D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 22 04-JUL-2002;
DynaVax Technologies Corporation (US)
LOCATION/Qualifiers
source
1. .22
/organism="synthetic construct"
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/db_xref="taxon:32630"
/notes="Polynucleotide containing CG"

ORIGIN
Query Match 100.0%; Score 10; DB 6; Length 22;
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Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 1 CGAACGTTTCG 10

RESULT 26
AX592332/c
LOCUS AX592332 22 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 22 from Patent WO02052002.
ACCESSION AX592332
VERSION AX592332.1 GI:27950434
KEYWORDS
SOURCE synthetic construct
synthetic construct
other sequences; artificial sequences.
REFERENCE
1
AUTHORS Fearon, K.L. and Dina, D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 22 04-JUL-2002;
DynaVax Technologies Corporation (US)
LOCATION/Qualifiers
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/db_xref="taxon:32630"
/notes="Polynucleotide containing CG"

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Qy 1 CGAACGTTTCG 10
Db 3 CGAACGTTTCG 12

RESULT 28
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LOCUS AX592338 22 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 28 from Patent WO02052002.
ACCESSION AX592338
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VERSION AX592338.1 GI:27950440
SOURCE .
ORGANISM synthetic construct
          synthetic construct
          other sequences; artificial sequences.
REFERENCE 1
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 28 04-JUL-2002;
          Dynavax Technologies Corporation (US)
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Best Local Similarity 100.0%; Pred. No. 2.4e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
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Db 12 CGAACGTTTCG 3

RESULT 29
AX592340
LOCUS AX592340 22 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 30 from Patent WO02052002.
ACCESSION AX592340
VERSION AX592340.1 GI:27950442
KEYWORDS
SOURCE synthetic construct
          synthetic construct
          other sequences; artificial sequences.
REFERENCE 1
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 30 04-JUL-2002;
          Dynavax Technologies Corporation (US)
FEATURES
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      /mol_type="unassigned DNA"
      /db_xref="taxon:32630"
      /note="Polynucleotide containing CG"
ORIGIN

Query Match 100.0%; Score 10; DB 6; Length 22;
Best Local Similarity 100.0%; Pred. No. 2.4e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
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Db 12 CGAACGTTTCG 3

RESULT 30
AX592340/C
LOCUS AX592340 22 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 30 from Patent WO02052002.
ACCESSION AX592340
VERSION AX592340.1 GI:27950442
KEYWORDS
SOURCE synthetic construct
          synthetic construct
          other sequences; artificial sequences.
REFERENCE 1
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 30 04-JUL-2002;
          Dynavax Technologies Corporation (US)
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Qy 1 CGAACGTTTCG 10
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RESULT 31
AX252517
LOCUS AX252517 24 bp DNA linear PAT 05-OCT-2001
DEFINITION Sequence 9 from Patent WO0168103.
ACCESSION AX252517
VERSION AX252517.1 GI:15985788
KEYWORDS
SOURCE synthetic construct
          synthetic construct
          other sequences; artificial sequences.
REFERENCE 1
AUTHORS van Nest,G.
TITLE Methods of ameliorating symptoms of herpes infection using
          immunomodulatory polynucleotide sequences
          Patent: WO 0168103-A 9 20-SEP-2001;
          Dynavax Technologies Corporation (US)
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RESULT 32
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DEFINITION Sequence 9 from Patent WO0168103.
ACCESSION AX252517
VERSION AX252517.1 GI:15985788
KEYWORDS
SOURCE synthetic construct
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          other sequences; artificial sequences.
REFERENCE 1
AUTHORS van Nest,G.
TITLE Methods of ameliorating symptoms of herpes infection using
          immunomodulatory polynucleotide sequences
          Patent: WO 0168103-A 9 20-SEP-2001;
          Dynavax Technologies Corporation (US)
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DEFINITION Sequence 1 from Patent WO02052002.
ACCESSION AX592311
VERSION AX592311.1 GI:27950413
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 1 04-JUL-2002;
Dynavax Technologies Corporation (US)
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Db 5 CGAACGTTTCG 14
RESULT 38
AX592311/c
LOCUS AX592311 24 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 1 from Patent WO02052002.
ACCESSION AX592311
VERSION AX592311.1 GI:27950413
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 1 04-JUL-2002;
Dynavax Technologies Corporation (US)
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ACCESSION AX592317
VERSION AX592317.1 GI:27950419
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1
AUTHORS Marahiel,M.A., Stachelhaus,T., Mootz,H. and Konz,D.
TITLE Nonribosomal peptide synthetase, process for producing the same and utilization thereof
JOURNAL Patent: JP 2002537806-A 25 12-NOV-2002;
MOHAMED A MARAHIEL,TORSTEN STACHELHAUS,HENNING MOOTZ,DIRK KONZ
OS Bacillus subtilis
PN JP 2002537806-A/25
PD 12-NOV-2002
PF 28-FEB-2000 JP 2000602764

TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 7 04-JUL-2002;
Dynavax Technologies Corporation (US)
FEATURES Location/Qualifiers
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/db_xref="taxon:32630"
/note="Polynucleotide containing CG"
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ACCESSION AX592317
VERSION AX592317.1 GI:27950419
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 7 04-JUL-2002;
Dynavax Technologies Corporation (US)
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RESULT 41
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LOCUS BD252019 27 bp DNA linear PAT 17-JUL-2003
DEFINITION Nonribosomal peptide synthetase, process for producing the same and utilization thereof.
ACCESSION BD252019
VERSION BD252019.1 GI:33061789
KEYWORDS JP 2002537806-A/25.
SOURCE Bacillus subtilis
ORGANISM Bacillus subtilis
REFERENCE 1 (bases 1 to 27)
AUTHORS Marahiel,M.A., Stachelhaus,T., Mootz,H. and Konz,D.
TITLE Nonribosomal peptide synthetase, process for producing the same and utilization thereof
JOURNAL Patent: JP 2002537806-A 25 12-NOV-2002;
MOHAMED A MARAHIEL,TORSTEN STACHELHAUS,HENNING MOOTZ,DIRK KONZ
OS Bacillus subtilis
PN JP 2002537806-A/25
PD 12-NOV-2002
PF 28-FEB-2000 JP 2000602764

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PR 03-MAR-1999 DE 199 09 146.3
PI MOHAMED A MARAHIEL,TORSTEN STACHELHAUS,HENNING MOOTZ,DIRK KONZ
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CC utilization thereof
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RESULT 42
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DEFINITION Nonribosomal peptide synthetase, process for producing the same and
utilization thereof.
ACCESSION BD252019
VERSION BD252019.1 GI:33061789
KEYWORDS JP 2002537806-A/25.
SOURCE Bacillus subtilis
ORGANISM Bacillus subtilis
Bacteria; Firmicutes; Bacillales; Bacillaceae; Bacillus.
REFERENCE 1 (bases 1 to 27)
AUTHORS Marahiel,M.A., Stachelhaus,T., Mootz,H. and Konz,D.
TITLE Nonribosomal peptide synthetase, process for producing the same and
utilization thereof
JOURNAL Patent: JP 2002537806-A 25 12-NOV-2002;
COMMENT MOHAMED A MARAHIEL,TORSTEN STACHELHAUS,HENNING MOOTZ,DIRK KONZ
OS Bacillus subtilis
PN JP 2002537806-A/25
PD 12-NOV-2002
PF 28-FEB-2000 JP 2000602764
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PI MOHAMED A MARAHIEL,TORSTEN STACHELHAUS,HENNING MOOTZ,DIRK KONZ
PC C12N15/09,C07K14/00//C12N9/00,C12N15/00
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RESULT 43
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DEFINITION Sequence 25 from Patent WO0052152.
ACCESSION AX035610
VERSION AX035610.1 GI:11191205
KEYWORDS
SOURCE Bacillus subtilis
ORGANISM Bacillus subtilis
Bacteria; Firmicutes; Bacillales; Bacillaceae; Bacillus.
REFERENCE 1
AUTHORS Stachelhaus,T., Konz,D., Mootz,H. and Marahiel,M.A.
TITLE Non-ribosomal peptide synthetases, method for producing same and
the use thereof
JOURNAL Patent: WO 0052152-A 25 08-SEP-2000;
MARAHIEL MOHAMED A (DE)
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Qy 1 CGAACGTTTCG 10
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ACCESSION AX035610
VERSION AX035610.1 GI:11191205
KEYWORDS
SOURCE Bacillus subtilis
ORGANISM Bacillus subtilis
Bacteria; Firmicutes; Bacillales; Bacillaceae; Bacillus.
REFERENCE 1
AUTHORS Stachelhaus,T., Konz,D., Mootz,H. and Marahiel,M.A.
TITLE Non-ribosomal peptide synthetases, method for producing same and
the use thereof
JOURNAL Patent: WO 0052152-A 25 08-SEP-2000;
STACHELHAUS TORSTEN (DE) ; KONZ DIRK (DE) ; MOOTZ HENNING (DE) ;
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RESULT 45
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LOCUS
DEFINITION Humanized anti-Pas antibody.
ACCESSION E40906
VERSION E40906.1 GI:18627483
KEYWORDS JP 2000166574-A/95.
SOURCE synthetic construct
ORGANISM synthetic construct

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LOCUS
DEFINITION Sequence 25 from Patent WO0052152.
ACCESSION AX035610
VERSION AX035610.1 GI:11191205
KEYWORDS
SOURCE Bacillus subtilis
ORGANISM Bacillus subtilis
Bacteria; Firmicutes; Bacillales; Bacillaceae; Bacillus.
REFERENCE 1
AUTHORS Stachelhaus,T., Konz,D., Mootz,H. and Marahiel,M.A.
TITLE Non-ribosomal peptide synthetases, method for producing same and
the use thereof
JOURNAL Patent: WO 0052152-A 25 08-SEP-2000;
STACHELHAUS TORSTEN (DE) ; KONZ DIRK (DE) ; MOOTZ HENNING (DE) ;
MARAHIEL MOHAMED A (DE)
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Db 10 CGAACGTTTCG 19

RESULT 44
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ACCESSION AX035610
VERSION AX035610.1 GI:11191205
KEYWORDS
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ORGANISM Bacillus subtilis
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TITLE Non-ribosomal peptide synthetases, method for producing same and
the use thereof
JOURNAL Patent: WO 0052152-A 25 08-SEP-2000;
STACHELHAUS TORSTEN (DE) ; KONZ DIRK (DE) ; MOOTZ HENNING (DE) ;
MARAHIEL MOHAMED A (DE)
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Db 19 CGAACGTTTCG 10

RESULT 45
E40906
LOCUS
DEFINITION Humanized anti-Pas antibody.
ACCESSION E40906
VERSION E40906.1 GI:18627483
KEYWORDS JP 2000166574-A/95.
SOURCE synthetic construct
ORGANISM synthetic construct

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other sequences; artificial sequences.
1 (bases 1 to 44)
Serizawa,N., Haruyama,H., Nakahara,K. and Tamaki,I.
Humanized anti-Fas antibody
Patent: JP 2000166574-A 95 20-JUN-2000;
SANKYO CO LTD
OS Artificial Sequence
PN JP 2000166574-A/95
PD 20-JUN-2000
PF 29-SEP-1999 JP 1999275441
PR NOBUKI SERIZAWA,HIDEYUKI HARUYAMA,KAORI NAKAHARA,IKUKO TAMAKI
PC C12N15/09,A61K39/00,A61K39/395,A61K39/395,A61P37/02,A61P43/00,
PC C07K16/18
PC C12N1/21,C12N5/10,C12P21/08/(C12N1/21,C12R1:19),C12N15/00, PC
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E40906/c
LOCUS Humanized anti-Fas antibody. 44 bp DNA linear PAT 31-JAN-2002
DEFINITION E40906
ACCESSION E40906.1 GI:18627483
VERSION JP 2000166574-A/95.
KEYWORDS synthetic construct
SOURCE synthetic construct
other sequences; artificial sequences.
REFERENCE 1 (bases 1 to 44)
AUTHORS Serizawa,N., Haruyama,H., Nakahara,K. and Tamaki,I.
TITLE Humanized anti-Fas antibody
JOURNAL Patent: JP 2000166574-A 95 20-JUN-2000;
SANKYO CO LTD
OS Artificial Sequence
PN JP 2000166574-A/95
PD 20-JUN-2000
PF 29-SEP-1999 JP 1999275441
PR NOBUKI SERIZAWA,HIDEYUKI HARUYAMA,KAORI NAKAHARA,IKUKO TAMAKI
PC C12N15/09,A61K39/00,A61K39/395,A61K39/395,A61P37/02,A61P43/00,
PC C07K16/18,
PC C12N1/21,C12N5/10,C12P21/08/(C12N1/21,C12R1:19),C12N15/00, PC
C12N5/00
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Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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RESULT 46
E40906/c
LOCUS Humanized anti-Fas antibody. 44 bp DNA linear PAT 31-JAN-2002
DEFINITION E40906
ACCESSION E40906.1 GI:18627483
VERSION JP 2000166574-A/95.
KEYWORDS synthetic construct
SOURCE synthetic construct
other sequences; artificial sequences.
REFERENCE 1 (bases 1 to 44)
AUTHORS Serizawa,N., Haruyama,H., Nakahara,K. and Tamaki,I.
TITLE Humanized anti-Fas antibody
JOURNAL Patent: JP 2000166574-A 95 20-JUN-2000;
SANKYO CO LTD
OS Artificial Sequence
PN JP 2000166574-A/95
PD 20-JUN-2000
PF 29-SEP-1999 JP 1999275441
PR NOBUKI SERIZAWA,HIDEYUKI HARUYAMA,KAORI NAKAHARA,IKUKO TAMAKI
PC C12N15/09,A61K39/00,A61K39/395,A61K39/395,A61P37/02,A61P43/00,
PC C07K16/18,
PC C12N1/21,C12N5/10,C12P21/08/(C12N1/21,C12R1:19),C12N15/00, PC
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RESULT 47
E40907
LOCUS Humanized anti-Fas antibody. 44 bp DNA linear PAT 31-JAN-2002
DEFINITION E40907
ACCESSION E40907
VERSION E40907.1 GI:18627484
KEYWORDS JP 2000166574-A/96.
SOURCE synthetic construct
ORGANISM synthetic construct
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REFERENCE 1 (bases 1 to 44)
AUTHORS Serizawa,N., Haruyama,H., Nakahara,K. and Tamaki,I.
TITLE Humanized anti-Fas antibody
JOURNAL Patent: JP 2000166574-A 96 20-JUN-2000;
SANKYO CO LTD
OS Artificial Sequence
PN JP 2000166574-A/96
PD 20-JUN-2000
PF 29-SEP-1999 JP 1999275441
PR NOBUKI SERIZAWA,HIDEYUKI HARUYAMA,KAORI NAKAHARA,IKUKO TAMAKI
PC C12N15/09,A61K39/00,A61K39/395,A61K39/395,A61P37/02,A61P43/00,
PC C07K16/18,
PC C12N1/21,C12N5/10,C12P21/08/(C12N1/21,C12R1:19),C12N15/00, PC
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E40907/c
LOCUS Humanized anti-Fas antibody. 44 bp DNA linear PAT 31-JAN-2002
DEFINITION E40907
ACCESSION E40907
VERSION E40907.1 GI:18627484
KEYWORDS JP 2000166574-A/96.
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ORGANISM synthetic construct
other sequences; artificial sequences.
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AUTHORS Serizawa,N., Haruyama,H., Nakahara,K. and Tamaki,I.
TITLE Humanized anti-Fas antibody
JOURNAL Patent: JP 2000166574-A 96 20-JUN-2000;
SANKYO CO LTD
OS Artificial Sequence
PN JP 2000166574-A/96
PD 20-JUN-2000
PF 29-SEP-1999 JP 1999275441
PR

PI NOBUKI SERIZAWA, HIDEYUKI HARUYAMA, KAORI NAKAHARA, IKUKO TAMAKI
 PC C12N15/09, A61K39/00, A61K39/395, A61K39/06, A61P37/02, A61P43/00,
 PC C07K16/18,
 PC C12N1/21, C12N5/10, C12P21/08// (C12N1/21, C12R1/19), C12N15/00, PC
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FEATURES

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RESULT 49
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 LOCUS
 DEFINITION Drug containing humanized anti-Fas antibody.
 ACCESSION BD090635
 VERSION BD090635.1 GI:22636245
 KEYWORDS JP 2001342148-A/95.
 SOURCE synthetic construct
 ORGANISM other sequences; artificial sequences.
 REFERENCE 1 (bases 1 to 44)
 AUTHORS Serizawa, N., Haruyama, H., Nakahara, K. and Tamaki, I.
 TITLE Drug containing humanized anti-Fas antibody
 JOURNAL Patent: JP 2001342148-A 95 11-DEC-2001;
 SANKYO CO LTD
 COMMENT OS Artificial Sequence
 PN JP 2001342148-A/95
 PD 11-DEC-2001
 PF 28-MAR-2001 JP 2001093106
 PI NOBUFUSA SERIZAWA, HIDEYUKI HARUYAMA, KAORI NAKAHARA, IKUKO TAMAKI
 PC A61K39/395, A61K38/00, A61P1/16, A61P7/06, A61P9/00, A61P9/10, PC
 A61P13/12.
 PC A61P19/02, A61P29/00, A61P37/00, A61P37/06, A61P37/08, A61P43/00//
 PC C12N15/09,
 PC A61K37/02, C12N15/00
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FEATURES

source

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 Db 6 CGAACGTTTCG 15

RESULT 50
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 ACCESSION BD090635
 VERSION BD090635.1 GI:22636245
 KEYWORDS JP 2001342148-A/95.
 SOURCE synthetic construct
 ORGANISM other sequences; artificial sequences.
 REFERENCE 1 (bases 1 to 44)
 AUTHORS Serizawa, N., Haruyama, H., Nakahara, K. and Tamaki, I.
 TITLE Drug containing humanized anti-Fas antibody
 JOURNAL Patent: JP 2001342148-A 95 11-DEC-2001;
 SANKYO CO LTD
 COMMENT OS Artificial Sequence
 PN JP 2001342148-A/95
 PD 11-DEC-2001
 PF 28-MAR-2001 JP 2001093106
 PI NOBUFUSA SERIZAWA, HIDEYUKI HARUYAMA, KAORI NAKAHARA, IKUKO TAMAKI
 PC A61K39/395, A61K38/00, A61P1/16, A61P7/06, A61P9/00, A61P9/10, PC
 A61P13/12.
 PC A61P19/02, A61P29/00, A61P37/00, A61P37/06, A61P37/08, A61P43/00//
 PC C12N15/09,
 PC A61K37/02, C12N15/00
 CC Description of Artificial Sequence: PCR primer to amplify a
 CC fragment of
 CC DNA encoding the light chain of a humanized anti-Fas antibody
 FH Key Location/Qualifiers
 FT source 1..44
 FT /organism='Artificial Sequence'.
 FEATURES source
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 /organism='synthetic construct'
 /mol_type='genomic DNA'
 /db_xref='taxon:32630'

ORIGIN

source

1..44

/organism='synthetic construct'

/mol_type='genomic DNA'

/db_xref='taxon:32630'

Query Match 100.0%; Score 10; DB 6; Length 44;

Best Local Similarity 100.0%; Pred. No. 2.4e+04;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

Db 15 CGAACGTTTCG 6

FEATURES

source

1..44

/organism='synthetic construct'

/mol_type='genomic DNA'

/db_xref='taxon:32630'

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Best Local Similarity 100.0%; Pred. No. 2.4e+04;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

Db 15 CGAACGTTTCG 6

RESULT 51

BD090636

LOCUS

DEFINITION Drug containing humanized anti-Fas antibody.

ACCESSION BD090636

VERSION BD090636.1 GI:22636246

KEYWORDS JP 2001342148-A/96.

SOURCE synthetic construct

ORGANISM other sequences; artificial sequences.

REFERENCE 1 (bases 1 to 44)

AUTHORS Serizawa, N., Haruyama, H., Nakahara, K. and Tamaki, I.

TITLE Drug containing humanized anti-Fas antibody

JOURNAL Patent: JP 2001342148-A 96 11-DEC-2001;
 SANKYO CO LTD
 COMMENT OS Artificial Sequence
 PN JP 2001342148-A/96
 PD 11-DEC-2001
 PF 28-MAR-2001 JP 2001093106
 PI NOBUFUSA SERIZAWA, HIDEYUKI HARUYAMA, KAORI NAKAHARA, IKUKO TAMAKI
 PC A61K39/395, A61K38/00, A61P1/16, A61P7/06, A61P9/00, A61P9/10, PC
 A61P13/12,
 PC A61P19/02, A61P29/00, A61P37/00, A61P37/06, A61P37/08, A61P43/00//
 PC C12N15/09,
 PC A61K37/02, C12N15/00
 CC Description of Artificial Sequence: PCR primer to amplify a
 CC fragment of
 CC DNA encoding the light chain of a humanized anti-Fas antibody
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 /db_xref='taxon:32630'

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PC A61K37/02,C12N15/00
CC Description of Artificial Sequence: PCR primer to amplify a
CC fragment of
CC DNA encoding the light chain of a humanized anti-Fas antibody
FH Key
FT source
FT 1..44
Location/Qualifiers
/organism='Artificial Sequence'.
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source
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/mol_type="genomic DNA"
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Best Local Similarity 100.0%; Pred. No. 2.4e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
Db 30 CGAACGTTTCG 39
RESULT 52
BD090636/c
LOCUS BD090636 44 bp DNA linear PAT 27-AUG-2002
DEFINITION Drug containing humanized anti-Fas antibody.
ACCESSION BD090636
VERSION BD090636.1 GI:22636246
KEYWORDS JP 2001342148-A/96.
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1 (bases 1 to 44)
AUTHORS Serizawa,N., Haruyama,H., Nakahara,K. and Tamaki,I.
TITLE Drug containing humanized anti-Fas antibody
JOURNAL Patent: JP 2001342148-A 96 11-DEC-2001;
SANKYO CO LTD
OS Artificial Sequence
PN JP 2001342148-A/96
PD 11-DEC-2001
PF 28-MAR-2001 JP 2001093106
PI NOBUFUSA SERIZAWA,HIDEYUKI HARUYAMA,KAORI NAKAHARA,IKUKO PI
TAMAKI
PC A61K39/395,A61K38/00,A61P1/16,A61P/06,A61P9/00,A61P9/10, PC
A61P13/12,
PC A61P19/02,A61P29/00,A61P37/00,A61P17/06,A61P37/08,A61P43/00//
PC C12N15/09,
PC A61K37/02,C12N15/00
CC Description of Artificial Sequence: PCR primer to amplify a
CC fragment of
CC DNA encoding the light chain of a humanized anti-Fas antibody
FH Key
FT source
FT 1..44
Location/Qualifiers
/organism='Artificial Sequence'.
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/mol_type="genomic DNA"
/db_xref="taxon:32630"
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Best Local Similarity 100.0%; Pred. No. 2.4e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
Db 39 CGAACGTTTCG 30
RESULT 53
AR222417
LOCUS AR222417 48 bp DNA linear PAT 18-DEC-2003
DEFINITION Sequence 16 from patent US 6429292.
ACCESSION AR222417
VERSION AR222417.1 GI:23329930
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 48)
AUTHORS Jefferson,R.A., Wilson,K.J. and Leader,M.
TITLE Glucuronide repressors and uses thereof
JOURNAL Patent: US 6429292-A 16 06-AUG-2002;
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Best Local Similarity 100.0%; Pred. No. 2.4e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
Db 25 CGAACGTTTCG 34

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LOCUS AR222417 48 bp DNA linear PAT 26-SEP-2002
DEFINITION Sequence 16 from patent US 6429292.
ACCESSION AR222417
VERSION AR222417.1 GI:23329930
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 48)
AUTHORS Jefferson,R.A., Wilson,K.J. and Leader,M.
TITLE Glucuronide repressors and uses thereof
JOURNAL Patent: US 6429292-A 16 06-AUG-2002;
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/mol_type="genomic DNA"
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Best Local Similarity 100.0%; Pred. No. 2.4e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
Db 25 CGAACGTTTCG 34
RESULT 54
AR222417/c
LOCUS AR222417 48 bp DNA linear PAT 26-SEP-2002
DEFINITION Sequence 16 from patent US 6429292.
ACCESSION AR222417
VERSION AR222417.1 GI:23329930
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 48)
AUTHORS Jefferson,R.A., Wilson,K.J. and Leader,M.
TITLE Glucuronide repressors and uses thereof
JOURNAL Patent: US 6429292-A 16 06-AUG-2002;
FEATURES
source
1..48
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/mol_type="genomic DNA"
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Best Local Similarity 100.0%; Pred. No. 2.4e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
Db 34 CGAACGTTTCG 25
RESULT 55
AR437283
LOCUS AR437283 48 bp DNA linear PAT 18-DEC-2003
DEFINITION Sequence 16 from patent US 6659764.
ACCESSION AR437283
VERSION AR437283.1 GI:40202185
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 48)
AUTHORS Xu,W.
TITLE Palm actuation lighter
JOURNAL Patent: US 6659764-A 16 09-DEC-2003;
FEATURES
source
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/organism="unknown"

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/mol_type="genomic DNA"

ORIGIN
Query Match      100.0%; Score 10; DB 6; Length 48;
Best Local Similarity 100.0%; Pred. No. 2.4e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
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Db 25 CGAACGTTTCG 34

RESULT 56
AR437283/c
LOCUS      AR437283      48 bp      DNA      linear      PAT 18-DEC-2003
DEFINITION Sequence 16 from patent US 6659764.
ACCESSION  AR437283
VERSION    AR437283.1 GI:40202185
KEYWORDS
SOURCE
ORGANISM   Unknown.
REFERENCE  1 (bases 1 to 48)
AUTHORS   Xu, W.
TITLE     Palm actuation lighter
JOURNAL   Patent: US 6659764-A 16 09-DEC-2003;
FEATURES   Location/Qualifiers
            source
            1..48
            /organism="unknown"
            /mol_type="genomic DNA"

ORIGIN
Query Match      100.0%; Score 10; DB 6; Length 48;
Best Local Similarity 100.0%; Pred. No. 2.4e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
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Db 34 CGAACGTTTCG 25

RESULT 57
CQ007200
LOCUS      CQ007200      51 bp      DNA      linear      PAT 16-JAN-2004
DEFINITION Sequence 5840 from Patent WO0147944.
ACCESSION  CQ007200
VERSION    CQ007200.1 GI:41013832
KEYWORDS
SOURCE     Homo sapiens (human)
ORGANISM   Homo sapiens
REFERENCE  1
AUTHORS   Shimkets, R.A. and Leach, M.
TITLE     Nucleic acids containing single nucleotide polymorphisms and
          methods of use thereof
JOURNAL   Patent: WO 0147944-A 5840 05-JUL-2001;
          Curagen Corporation (US)
FEATURES   Location/Qualifiers
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            /db_xref="taxon:9606"
            /note="Accession number cg40388639"

ORIGIN
Query Match      100.0%; Score 10; DB 6; Length 51;
Best Local Similarity 100.0%; Pred. No. 2.4e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
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Db 19 CGAACGTTTCG 28

RESULT 58
CQ007200/c
LOCUS      CQ007200      51 bp      DNA      linear      PAT 16-JAN-2004
DEFINITION Sequence 5840 from Patent WO0147944.
ACCESSION  CQ007200
VERSION    CQ007200.1 GI:41013832
KEYWORDS
SOURCE     Homo sapiens (human)
ORGANISM   Homo sapiens
REFERENCE  1
AUTHORS   Shimkets, R.A. and Leach, M.
TITLE     Nucleic acids containing single nucleotide polymorphisms and
          methods of use thereof
JOURNAL   Patent: WO 0147944-A 5840 05-JUL-2001;
          Curagen Corporation (US)
FEATURES   Location/Qualifiers
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            /organism="Homo sapiens"
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            /db_xref="taxon:9606"
            /note="Accession number cg40388639"

ORIGIN
Query Match      100.0%; Score 10; DB 6; Length 51;
Best Local Similarity 100.0%; Pred. No. 2.4e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
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Db 28 CGAACGTTTCG 19

RESULT 59
A44231
LOCUS      A44231      71 bp      DNA      linear      PAT 07-MAR-1997
DEFINITION Sequence 12 from Patent WO9510618.
ACCESSION  A44231
VERSION    A44231.1 GI:22999087
KEYWORDS
SOURCE     unidentified
          unclassified
          1 (bases 1 to 71)
REFERENCE  1
AUTHORS   Yu, S., Bojsen, K., Kragh, K.M., Bojko, M., Nielsen, J. and Marcussen, J.
TITLE     USE OF -g(a)-1,4-GLUCAN LYASE FOR PREPARATION OF
          1,5-D-ANHYDROFRUCTOSE ALPHA-1,4-GLUCAN LYASE FROM A FUNGUS INFECTED
          ALGAE, ITS PURIFICATION, GENE CLONING AND EXPRESSION IN
          MICROORGANISMS
JOURNAL   Patent: WO 9510618-A 12 20-APR-1995;
          DANISCO (DK)
COMMENT   Other publication GB 2297090 960724
          Other publication CA 2174115 950420
          Other publication GB 2296717 960710
          Other publication AU 7937994 950504
          Other publication AU 7856394 950504.
FEATURES   Location/Qualifiers
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            /organism="unidentified"
            /mol_type="unassigned DNA"
            /db_xref="taxon:32644"

ORIGIN
Query Match      100.0%; Score 10; DB 6; Length 71;
Best Local Similarity 100.0%; Pred. No. 2.5e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
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Db 17 CGAACGTTTCG 26

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RESULT 60
A44231/c
LOCUS A44231 71 bp DNA linear PAT 07-MAR-1997
DEFINITION Sequence 12 from Patent WO9510618.
ACCESSION A44231
VERSION A44231.1 GI:2299087
KEYWORDS
SOURCE unidentified
ORGANISM unclassified
REFERENCE 1 (bases 1 to 71)
AUTHORS Yu, S., Bojsen, K., Kragh, K.M., Bojko, M., Nielsen, J. and Marcussen, J.
TITLE USE OF -g(a)-1,4-GLUCAN LYASE FOR PREPARATION OF
1,5-D-ANHYDROFRUCTOSE
JOURNAL Patent: WO 9510618-A 22 20-APR-1995;
DANISCO (DK); YU SHUKUN (SE)
FEATURES
source Location/Qualifiers
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/mol_type="unassigned DNA"
/db_xref="taxon:32644"
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Query Match 100.0%; Score 10; DB 6; Length 71;
Best Local Similarity 100.0%; Pred. No. 2.5e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
Db 26 CGAACGTTTCG 17
RESULT 61
A72728
LOCUS A72728 71 bp DNA linear PAT 15-OCT-1999
DEFINITION Sequence 22 from Patent WO9510616.
ACCESSION A72728
VERSION A72728.1 GI:6063802
KEYWORDS
SOURCE unidentified
ORGANISM unclassified
REFERENCE 1 (bases 1 to 71)
AUTHORS Yu, S. and Bojsen, K.
TITLE USE OF ALPHA -1,4-GLUCAN LYASE FOR PREPARATION OF
1,5-D-ANHYDROFRUCTOSE
JOURNAL Patent: WO 9510616-A 22 20-APR-1995;
DANISCO (DK); YU SHUKUN (SE)
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Best Local Similarity 100.0%; Pred. No. 2.5e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
Db 26 CGAACGTTTCG 17
RESULT 62
A72728/c
LOCUS A72728 71 bp DNA linear PAT 15-OCT-1999
DEFINITION Sequence 22 from Patent WO9510616.
ACCESSION A72728
VERSION A72728.1 GI:6063802
KEYWORDS
SOURCE unidentified
ORGANISM unclassified
REFERENCE 1 (bases 1 to 71)
AUTHORS Yu, S. and Bojsen, K.
TITLE USE OF ALPHA -1,4-GLUCAN LYASE FOR PREPARATION OF
1,5-D-ANHYDROFRUCTOSE
JOURNAL Patent: WO 9510616-A 22 20-APR-1995;
DANISCO (DK); YU SHUKUN (SE)
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Best Local Similarity 100.0%; Pred. No. 2.5e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
Db 26 CGAACGTTTCG 17
RESULT 63
AR408862
LOCUS AR408862 71 bp mRNA linear PAT 18-DEC-2003
DEFINITION Sequence 22 from patent US 6632643.
ACCESSION AR408862
VERSION AR408862.1 GI:40159263
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 71)
AUTHORS Yu, S., Bojsen, K., Kragh, K., Bojko, M., Nielsen, J., Marcussen, J. and Christensen, I.
TITLE Use of .alpha.-1,4-glucan lyase for preparation of
1,5-D-hydrofructose
JOURNAL Patent: US 6632643-A 22 14-OCT-2003;
FEATURES
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/organism="unknown"
/mol_type="mRNA"
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Query Match 100.0%; Score 10; DB 6; Length 71;
Best Local Similarity 100.0%; Pred. No. 2.5e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
Db 17 CGAACGTTTCG 26
RESULT 64
AR408862/c
LOCUS AR408862 71 bp mRNA linear PAT 18-DEC-2003
DEFINITION Sequence 22 from patent US 6632643.
ACCESSION AR408862
VERSION AR408862.1 GI:40159263
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.

RESULT 62
A72728/c
LOCUS A72728 71 bp DNA linear PAT 15-OCT-1999
DEFINITION Sequence 22 from Patent WO9510616.
ACCESSION A72728
VERSION A72728.1 GI:6063802
KEYWORDS
SOURCE unidentified
ORGANISM unclassified
REFERENCE 1 (bases 1 to 71)
AUTHORS Yu, S. and Bojsen, K.
TITLE USE OF ALPHA -1,4-GLUCAN LYASE FOR PREPARATION OF
1,5-D-ANHYDROFRUCTOSE
JOURNAL Patent: WO 9510616-A 22 20-APR-1995;
DANISCO (DK); YU SHUKUN (SE)
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Best Local Similarity 100.0%; Pred. No. 2.5e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
Db 26 CGAACGTTTCG 17
RESULT 63
AR408862
LOCUS AR408862 71 bp mRNA linear PAT 18-DEC-2003
DEFINITION Sequence 22 from patent US 6632643.
ACCESSION AR408862
VERSION AR408862.1 GI:40159263
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 71)
AUTHORS Yu, S., Bojsen, K., Kragh, K., Bojko, M., Nielsen, J., Marcussen, J. and Christensen, I.
TITLE Use of .alpha.-1,4-glucan lyase for preparation of
1,5-D-hydrofructose
JOURNAL Patent: US 6632643-A 22 14-OCT-2003;
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Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
Db 17 CGAACGTTTCG 26
RESULT 64
AR408862/c
LOCUS AR408862 71 bp mRNA linear PAT 18-DEC-2003
DEFINITION Sequence 22 from patent US 6632643.
ACCESSION AR408862
VERSION AR408862.1 GI:40159263
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.

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REFERENCE 1 (bases 1 to 71)
AUTHORS Yu,S., Bojsen,K., Kragh,K., Bojko,M., Nielsen,J., Marcussen,J. and
         Christensen,T.
TITLE Use of .alpha.-1,4-glucan lyase for preparation of
JOURNAL 1,5-D-hydrofructose
PATENT: US 6632643-A 22 14-OCT-2003;
FEATURES Location/Qualifiers
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Query Match 100.0%; Score 10; DB 6; Length 71;
Best Local Similarity 100.0%; Pred. No. 2.5e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 26 CGAACGTTTCG 17
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RESULT 65
LOCUS I40727 77 bp DNA linear PAT 13-MAY-1997
DEFINITION Sequence 58 from patent US 5622828.
ACCESSION I40727
VERSION I40727.1 GI:2082207
KEYWORDS
SOURCE
ORGANISM
REFERENCE 1 (bases 1 to 77)
AUTHORS Parma,D.H. and Gold,L.
TITLE High-affinity oligonucleotide ligands to secretory phospholipase A2
JOURNAL (sPLA sub.2)
PATENT: US 5622828-A 58 22-APR-1997;
FEATURES Location/Qualifiers
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            /organism="unknown"
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Best Local Similarity 100.0%; Pred. No. 2.5e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 48 CGAACGTTTCG 57
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RESULT 66
LOCUS I40727/c 77 bp DNA linear PAT 13-MAY-1997
DEFINITION Sequence 58 from patent US 5622828.
ACCESSION I40727
VERSION I40727.1 GI:2082207
KEYWORDS
SOURCE
ORGANISM
REFERENCE 1 (bases 1 to 77)
AUTHORS Parma,D.H. and Gold,L.
TITLE High-affinity oligonucleotide ligands to secretory phospholipase A2
JOURNAL (sPLA sub.2)
PATENT: US 5622828-A 58 22-APR-1997;
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Query Match 100.0%; Score 10; DB 6; Length 77;

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Best Local Similarity 100.0%; Pred. No. 2.5e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 57 CGAACGTTTCG 48
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RESULT 67
LOCUS AR526149 89 bp DNA linear PAT 22-SEP-2004
DEFINITION Sequence 31109 from patent US 6703491.
ACCESSION AR526149
VERSION AR526149.1 GI:52461637
KEYWORDS
SOURCE
ORGANISM
REFERENCE 1 (bases 1 to 89)
AUTHORS Homburger,S.A., Ebens,A.J. Jr., Erickson,C.S., Francis-Lang,H.L.,
         Margolis,J.S., Reddy,B.P., Ruddy,D.A. and Buchman,A.R.
TITLE Drosophila sequences
JOURNAL Patent: US 6703491-A 31109 09-MAR-2004;
FEATURES Location/Qualifiers
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            /organism="unknown"
            /mol_type="genomic DNA"

ORIGIN
Query Match 100.0%; Score 10; DB 6; Length 89;
Best Local Similarity 100.0%; Pred. No. 2.5e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 14 CGAACGTTTCG 23
|||||

RESULT 68
LOCUS AR526149/c 89 bp DNA linear PAT 22-SEP-2004
DEFINITION Sequence 31109 from patent US 6703491.
ACCESSION AR526149
VERSION AR526149.1 GI:52461637
KEYWORDS
SOURCE
ORGANISM
REFERENCE 1 (bases 1 to 89)
AUTHORS Homburger,S.A., Ebens,A.J. Jr., Erickson,C.S., Francis-Lang,H.L.,
         Margolis,J.S., Reddy,B.P., Ruddy,D.A. and Buchman,A.R.
TITLE Drosophila sequences
JOURNAL Patent: US 6703491-A 31109 09-MAR-2004;
FEATURES Location/Qualifiers
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            /organism="unknown"
            /mol_type="genomic DNA"

ORIGIN
Query Match 100.0%; Score 10; DB 6; Length 89;
Best Local Similarity 100.0%; Pred. No. 2.5e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 23 CGAACGTTTCG 14
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RESULT 69
LOCUS AX325363 121 bp DNA linear PAT 02-SEP-2002
DEFINITION Sequence 1501 from Patent WO0192512.
ACCESSION AX325363

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MICROORGANISMS
JOURNAL      Patent: WO 9510618-A 14 20-APR-1995;
COMMENT      DANISCO (DK)
              Other publication GB 2297090 960724
              Other publication CA 2174115 950420
              Other publication GB 2296717 960710
              Other publication AU 7937994 950504
              Other publication AU 7856394 950504
FEATURES     Location/Qualifiers
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Best Local Similarity 100.0%; Pred. No. 2.6e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
Db 17 CGAACGTTTCG 26

RESULT 74
A44233/c      A44233      160 bp      DNA      linear      PAT 07-MAR-1997
LOCUS
DEFINITION      Sequence 14 from Patent WO9510618.
ACCESSION      A44233
VERSION
KEYWORDS
SOURCE
ORGANISM
REFERENCE
1 (bases 1 to 160)
AUTHORS
Yu, S., Bojsen, K., Kragh, K.M., Bojko, M., Nielsen, J., and Marcussen, J.
TITLE
USE OF -G(1a)-1,4-GLUCAN LYASE FOR PREPARATION OF
1,5-D-ANHYDROFRUCTOSE ALPHA-1,4-GLUCAN LYASE FROM A FUNGUS INFECTED
ALGAE, ITS PURIFICATION, GENE CLONING AND EXPRESSION IN
MICROORGANISMS
JOURNAL      Patent: WO 9510618-A 14 20-APR-1995;
COMMENT      DANISCO (DK)
              Other publication GB 2297090 960724
              Other publication CA 2174115 950420
              Other publication GB 2296717 960710
              Other publication AU 7937994 950504
              Other publication AU 7856394 950504
FEATURES     Location/Qualifiers
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Query Match      100.0%; Score 10; DB 6; Length 160;
Best Local Similarity 100.0%; Pred. No. 2.6e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
Db 26 CGAACGTTTCG 17

RESULT 75
A72730
LOCUS
DEFINITION      Sequence 24 from Patent WO9510616.
ACCESSION      A72730
VERSION
KEYWORDS
SOURCE
ORGANISM
REFERENCE
1 (bases 1 to 160)
AUTHORS
Yu, S., Bojsen, K., Kragh, K., Bojko, M., Nielsen, J., Marcussen, J. and
Christensen, T.
TITLE
Use of alpha-1,4-glucan lyase for preparation of
1,5-D-hydrofructose
JOURNAL      Patent: US 6632643-A 24 14-OCT-2003;
FEATURES     Location/Qualifiers
              source
              1. .160
              /organism="unknown"

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REFERENCE
1 (bases 1 to 160)
AUTHORS
Yu, S. and Bojsen, K.
TITLE
USE OF ALPHA -1,4-GLUCAN LYASE FOR PREPARATION OF
1,5-D-ANHYDROFRUCTOSE
JOURNAL      Patent: WO 9510616-A 24 20-APR-1995;
              DANISCO (DK); YU SHUKUN (SE)
FEATURES     Location/Qualifiers
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Best Local Similarity 100.0%; Pred. No. 2.6e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
Db 17 CGAACGTTTCG 26

RESULT 76
A72730/c      A72730      160 bp      DNA      linear      PAT 15-OCT-1999
LOCUS
DEFINITION      Sequence 24 from Patent WO9510616.
ACCESSION      A72730
VERSION
KEYWORDS
SOURCE
ORGANISM
REFERENCE
1 (bases 1 to 160)
AUTHORS
Yu, S. and Bojsen, K.
TITLE
USE OF ALPHA -1,4-GLUCAN LYASE FOR PREPARATION OF
1,5-D-ANHYDROFRUCTOSE
JOURNAL      Patent: WO 9510616-A 24 20-APR-1995;
              DANISCO (DK); YU SHUKUN (SE)
FEATURES     Location/Qualifiers
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Best Local Similarity 100.0%; Pred. No. 2.6e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
Db 26 CGAACGTTTCG 17

RESULT 77
AR408863
LOCUS
DEFINITION      Sequence 24 from patent US 6632643.
ACCESSION      AR408863
VERSION
KEYWORDS
SOURCE
ORGANISM
REFERENCE
1 (bases 1 to 160)
AUTHORS
Yu, S., Bojsen, K., Kragh, K., Bojko, M., Nielsen, J., Marcussen, J. and
Christensen, T.
TITLE
Use of alpha-1,4-glucan lyase for preparation of
1,5-D-hydrofructose
JOURNAL      Patent: US 6632643-A 24 14-OCT-2003;
FEATURES     Location/Qualifiers
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/mol_type="mRNA"

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 Db 17 CGAACGTTTCG 26

RESULT 78

AR408863/c
 LOCUS AR408863 160 bp mRNA linear PAT 18-DEC-2003
 DEFINITION Sequence 24 from patent US 6632643.
 ACCESSION AR408863
 VERSION AR408863.1 GI:40159264
 KEYWORDS
 SOURCE Unknown.
 ORGANISM Unclassified.
 REFERENCE 1 (bases 1 to 160)
 AUTHORS Yu, S., Bojsen, K., Kragh, K., Bojko, M., Nielsen, J., Marcussen, J. and Christensen, T.
 TITLE Use of alpha-1,4-glucan lyase for preparation of 1,5-D-hydrofructose
 JOURNAL Patent: US 6632643-A 24 14-OCT-2003;
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Query Match 100.0%; Score 10; DB 6; Length 160;
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 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
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 Db 26 CGAACGTTTCG 17

RESULT 79

S77483
 LOCUS S77483 206 bp mRNA linear ROD 25-AUG-1995
 DEFINITION growth hormone receptor/growth hormone-binding protein (5' region, variant transcript V1) [rats, liver, mRNA Partial, 206 nt].
 ACCESSION S77483
 VERSION S77483.1 GI:957220
 KEYWORDS
 SOURCE Rattus sp.
 ORGANISM Rattus sp.
 REFERENCE 1 (bases 1 to 206)
 AUTHORS Domene, H.M., Cassorla, F., Werner, H., Roberts, C.T. Jr. and Leroith, D.
 TITLE Rat growth hormone receptor/growth hormone-binding protein mRNAs with divergent 5'-untranslated regions are expressed in a tissue-specific manner
 JOURNAL DNA Cell Biol. 14 (3), 195-204 (1995)
 MEDLINE 95186057
 PUBMED 7880440
 REMARK GenBank staff at the National Library of Medicine created this entry [NCBI gibseq 165589] from the original journal article.

FEATURES

source 1..206
 /organism="Rattus sp."
 /mol_type="mRNA"
 /db_xref="taxon:10118"
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gene

/gene="growth hormone receptor/growth hormone-binding protein"

ORIGIN

Query Match 100.0%; Score 10; DB 10; Length 206;
 Best Local Similarity 100.0%; Pred. No. 2.6e+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
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 Db 177 CGAACGTTTCG 186

RESULT 80

S77483/c
 LOCUS S77483 206 bp mRNA linear ROD 25-AUG-1995
 DEFINITION growth hormone receptor/growth hormone-binding protein (5' region, variant transcript V1) [rats, liver, mRNA Partial, 206 nt].
 ACCESSION S77483
 VERSION S77483.1 GI:957220
 KEYWORDS
 SOURCE Rattus sp.
 ORGANISM Rattus sp.
 REFERENCE 1 (bases 1 to 206)
 AUTHORS Domene, H.M., Cassorla, F., Werner, H., Roberts, C.T. Jr. and Leroith, D.
 TITLE Rat growth hormone receptor/growth hormone-binding protein mRNAs with divergent 5'-untranslated regions are expressed in a tissue-specific manner
 JOURNAL DNA Cell Biol. 14 (3), 195-204 (1995)
 MEDLINE 95186057
 PUBMED 7880440
 REMARK GenBank staff at the National Library of Medicine created this entry [NCBI gibseq 165589] from the original journal article.

FEATURES

source 1..206
 /organism="Rattus sp."
 /mol_type="mRNA"
 /db_xref="taxon:10118"
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 /gene="growth hormone receptor/growth hormone-binding protein"

gene

ORIGIN

Query Match 100.0%; Score 10; DB 10; Length 206;
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 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
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 Db 186 CGAACGTTTCG 177

RESULT 81

AF386445
 LOCUS AF386445 222 bp DNA linear PRI 02-JUN-2002
 DEFINITION Homo sapiens clone BF3N3-K3-C3/A27-1-P immunoglobulin kappa light chain variable region gene, partial cds.
 ACCESSION AF386445
 VERSION AF386445.1 GI:21311067
 KEYWORDS
 SOURCE Homo sapiens (human)
 ORGANISM Homo sapiens
 REFERENCE 1 (bases 1 to 222)
 AUTHORS Monson, N.L. and Lipsky, P.E.
 TITLE The Role of CD40-CD40 Ligand (CD154) Interactions in Immunoglobulin Light Chain Repertoire Generation and Somatic Mutation
 JOURNAL Unpublished

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REFERENCE 2 (bases 1 to 222)
AUTHORS Monson,N.I. and Lipsky,P.E.
TITLE Direct Submission
JOURNAL Submitted (29-MAY-2001) Neurology, University of Texas Southwestern
Medical Center, 5323 Harry Hines Blvd, Dallas, TX 75390, USA
FEATURES
  Location/Qualifiers
    source 1..222
      /organism="Homo sapiens"
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      /db_xref="taxon:9606"
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      region"
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      /db_xref="GI:21311068"
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Query Match 100.0%; Score 10; DB 9; Length 222;
Best Local Similarity 100.0%; Pred. No. 2.6e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 211 CGAACGTTTCG 220

RESULT 82
LOCUS AF386445 222 bp DNA linear PRI 02-JUN-2002
DEFINITION Homo sapiens clone BFJN3-K3-G3/A27-1-P immunoglobulin kappa light
chain variable region gene, partial cds.
ACCESSION AF386445
VERSION AF386445.1 GI:21311067
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM
  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
  Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1 (bases 1 to 222)
AUTHORS Monson,N.I. and Lipsky,P.E.
TITLE The Role of CD40-CD40 Ligand (CD154) Interactions in Immunoglobulin
Light Chain Repertoire Generation and Somatic Mutation
JOURNAL Unpublished
REFERENCE 2 (bases 1 to 222)
AUTHORS Monson,N.I. and Lipsky,P.E.
TITLE Direct Submission
JOURNAL Submitted (29-MAY-2001) Neurology, University of Texas Southwestern
Medical Center, 5323 Harry Hines Blvd, Dallas, TX 75390, USA
FEATURES
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    source 1..222
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      /codon_start=1
      /product="immunoglobulin kappa light chain variable
      region"
      /protein_id="AA046533.1"
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mRNA
CDS

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ORIGIN
Query Match 100.0%; Score 10; DB 9; Length 222;
Best Local Similarity 100.0%; Pred. No. 2.6e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 220 CGAACGTTTCG 211

RESULT 83
LOCUS HSU07521 240 bp mRNA linear PRI 14-APR-1994
DEFINITION Human clone Z20 immunoglobulin kappa chain (IGK) mRNA, VKIII-JK1
region, partial cds.
ACCESSION U07521
VERSION U07521.1 GI:470577
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM
  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
  Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1 (bases 1 to 240)
AUTHORS Pasquali,J.
TITLE Evidence that the VKIII gene usage is non stochastic in both adult
and newborn peripheral B cells and that peripheral CD5+ adult B
cells are oligoclonal
JOURNAL J. Clin. Invest. (1994) In press
REFERENCE 2 (bases 1 to 240)
AUTHORS Pasquali,J.
TITLE Direct Submission
JOURNAL Submitted (07-MAR-1994) Jean-Louis Pasquali, Laboratoire
d'Immunopathologie, Centre de Recherche d'Immunohematologie,
Hopital Central, Hopitaux Universitaires, Strasbourg 67091, France
FEATURES
  Location/Qualifiers
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      /protein_id="AAAI7644.1"
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Best Local Similarity 100.0%; Pred. No. 2.6e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 229 CGAACGTTTCG 238

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RESULT 84
HSU07521/c      240 bp  mRNA  linear  PRI 14-APR-1994
LOCUS           Human clone Z20 immunoglobulin kappa chain (IgK) mRNA, VKIII-JK1
DEFINITION      region, partial cds.
ACCESSION       U07521
VERSION         U07521.1 GI:470577
KEYWORDS        .
SOURCE          Homo sapiens (human)
ORGANISM        Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.
REFERENCE
AUTHORS         Pasquali,J.
TITLE           Evidence that the VKIII gene usage is non stochastic in both adult
                and newborn peripheral B cells and that peripheral CD5+ adult B
                cells are oligoclonal
JOURNAL         J. Clin. Invest. (1994) In press
REFERENCE
AUTHORS         Pasquali,J.
TITLE           Direct Submission
JOURNAL         Submitted (07-MAR-1994) Jean-Louis Pasquali, Laboratoire
                d'Immunopathologie, Centre de Recherche d'Immunohematologie,
                Hopital Central, Hopitaux Universitaires, Strasbourg 67091, France
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ORIGIN
Query Match      100.0%; Score 10; DB 9; Length 240;
Best Local Similarity 100.0%; Pred. No. 2.6e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1  CGAACGTTTCG 10
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Db      238 CGAACGTTTCG 229

RESULT 85
HSA298488
LOCUS           HSA298488      241 bp  DNA  linear  PRI 01-AUG-2000
DEFINITION      Homo sapiens partial IGVKL2 gene for immunoglobulin kappa chain
                variable region, patient 1, small EBER+ cell isolate 2.43.
ACCESSION       AJ298488
VERSION         AJ298488.1 GI:9663253
KEYWORDS        IGVKL2 gene; immunoglobulin kappa chain; variable region.
SOURCE          Homo sapiens (human)
ORGANISM        Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.
REFERENCE
AUTHORS         Spieker,T., Kurth,J., Kueppers,R., Rajewsky,K., Braeuninger,A. and
                Hansmann,M.L.
TITLE           Molecular single cell analysis of the clonal relationship of small
                Epstein-Barr virus infected cells and Epstein-Barr virus harboring
                Hodgkin and Reed/Sternberg cells in Hodgkin's disease
JOURNAL         Unpublished
REFERENCE
AUTHORS         Spieker,T.
TITLE           Direct Submission
JOURNAL         Submitted (26-APR-2000) Spieker T., Pathology, University-Clinic,
                Theodor-Stern-Kai 7, 60590 Frankfurt, GERMANY
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                /protein_id="CAC01171.1"
                /db_xref="GI:9663254"
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ORIGIN
Query Match      100.0%; Score 10; DB 9; Length 241;
Best Local Similarity 100.0%; Pred. No. 2.6e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1  CGAACGTTTCG 10
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Db      232 CGAACGTTTCG 241

RESULT 86
HSA298488/c
LOCUS           HSA298488      241 bp  DNA  linear  PRI 01-AUG-2000
DEFINITION      Homo sapiens partial IGVKL2 gene for immunoglobulin kappa chain
                variable region, patient 1, small EBER+ cell isolate 2.43.
ACCESSION       AJ298488
VERSION         AJ298488.1 GI:9663253
KEYWORDS        IGVKL2 gene; immunoglobulin kappa chain; variable region.
SOURCE          Homo sapiens (human)
ORGANISM        Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.
REFERENCE
AUTHORS         Spieker,T., Kurth,J., Kueppers,R., Rajewsky,K., Braeuninger,A. and
                Hansmann,M.L.
TITLE           Molecular single cell analysis of the clonal relationship of small
                Epstein-Barr virus infected cells and Epstein-Barr virus harboring
                Hodgkin and Reed/Sternberg cells in Hodgkin's disease
JOURNAL         Unpublished
REFERENCE
AUTHORS         Spieker,T.
TITLE           Direct Submission
JOURNAL         Submitted (26-APR-2000) Spieker T., Pathology, University-Clinic,
                Theodor-Stern-Kai 7, 60590 Frankfurt, GERMANY
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.
REFERENCE
AUTHORS         Spieker,T., Kurth,J., Kueppers,R., Rajewsky,K., Braeuninger,A. and
                Hansmann,M.L.
TITLE           Molecular single cell analysis of the clonal relationship of small
                Epstein-Barr virus infected cells and Epstein-Barr virus harboring
                Hodgkin and Reed/Sternberg cells in Hodgkin's disease
JOURNAL         Unpublished
REFERENCE
AUTHORS         Spieker,T.
TITLE           Direct Submission
JOURNAL         Submitted (26-APR-2000) Spieker T., Pathology, University-Clinic,
                Theodor-Stern-Kai 7, 60590 Frankfurt, GERMANY
FEATURES
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                /db_xref="GI:9663254"
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ORIGIN
Query Match      100.0%; Score 10; DB 9; Length 241;
Best Local Similarity 100.0%; Pred. No. 2.6e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1  CGAACGTTTCG 10
        |||||
Db      232 CGAACGTTTCG 241

RESULT 86
HSA298488/c
LOCUS           HSA298488      241 bp  DNA  linear  PRI 01-AUG-2000
DEFINITION      Homo sapiens partial IGVKL2 gene for immunoglobulin kappa chain
                variable region, patient 1, small EBER+ cell isolate 2.43.
ACCESSION       AJ298488
VERSION         AJ298488.1 GI:9663253
KEYWORDS        IGVKL2 gene; immunoglobulin kappa chain; variable region.
SOURCE          Homo sapiens (human)
ORGANISM        Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.
REFERENCE
AUTHORS         Spieker,T., Kurth,J., Kueppers,R., Rajewsky,K., Braeuninger,A. and
                Hansmann,M.L.
TITLE           Molecular single cell analysis of the clonal relationship of small
                Epstein-Barr virus infected cells and Epstein-Barr virus harboring
                Hodgkin and Reed/Sternberg cells in Hodgkin's disease
JOURNAL         Unpublished
REFERENCE
AUTHORS         Spieker,T.
TITLE           Direct Submission
JOURNAL         Submitted (26-APR-2000) Spieker T., Pathology, University-Clinic,
                Theodor-Stern-Kai 7, 60590 Frankfurt, GERMANY
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source          1..241
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/db_xref="taxon:9606"
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FSGSGSTDFSLTISLSQSEDAFYVYCCQYDNWTF"
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/product="immunoglobulin kappa chain variable region"

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Query Match 100.0%; Score 10; DB 9; Length 241;
Best Local Similarity 100.0%; Pred. No. 2.6e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 241 CGAACGTTTCG 232

RESULT 87
HSA415205 241 bp DNA linear PRI 12-OCT-2001
LOCUS Homo sapiens partial IGVB3 gene for immunoglobulin kappa chain
DEFINITION variable region, donor BJ, cell148.
ACCESSION AJ415205
VERSION AJ415205.1 GI:16076118
KEYWORDS IGKV gene; immunoglobulin kappa chain; variable region.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
REFERENCE 1 Goossens,T., Brauning,A., Klein,U., Kuppers,R. and Rajewsky,K.
AUTHORS Receptor revision plays no major role in shaping the receptor
TITLE repertoire of human memory B cells after the onset of somatic
JOURNAL hypermutation
REFERENCE 2 Eur. J. Immunol.
AUTHORS (bases 1 to 241)
TITLE Brauning,A.
JOURNAL Direct Submission
TITLE Submitted (21-SEP-2001) Brauning A., Pathology, University of
JOURNAL Frankfurt, Theodor Stern Kai 7, 60590, GERMANY
FEATURES
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/organism="Homo sapiens"
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/clone="cell148"
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/rearranged
/notes="class-switched lambda expressing"
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/gene="IGVB3"
V_region <1. .>241
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ORIGIN /product="immunoglobulin kappa chain variable region"
Query Match 100.0%; Score 10; DB 9; Length 241;
Best Local Similarity 100.0%; Pred. No. 2.6e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 241 CGAACGTTTCG 232

RESULT 89
HSA415198 245 bp DNA linear PRI 12-OCT-2001
LOCUS Homo sapiens partial IGVL6 gene for immunoglobulin kappa chain
DEFINITION variable region, donor BJ, cell121.
ACCESSION AJ415198
VERSION AJ415198.1 GI:16076111
KEYWORDS IGKV gene; immunoglobulin kappa chain; variable region.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
REFERENCE 1 Goossens,T., Brauning,A., Klein,U., Kuppers,R. and Rajewsky,K.
AUTHORS Receptor revision plays no major role in shaping the receptor
TITLE repertoire of human memory B cells after the onset of somatic
JOURNAL hypermutation
REFERENCE 2 Eur. J. Immunol.
AUTHORS (bases 1 to 245)
```

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AUTHORS      Brauning,A.
TITLE        Direct Submission
JOURNAL      Submitted (21-SEP-2001) Brauning A., Pathology, University of
              Frankfurt, Theodor Stern Kai 7, 60590, GERMANY
FEATURES
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             /db_xref="taxon:9606"
             /clone="cell121"
             /cell_type="B cell"
             /rearranged
             /note="class-switched lambda expressing"
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  V_region   <1. .>245
             /gene="IGVKL6"
             /product="immunoglobulin kappa chain variable region"
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Query Match      100.0%; Score 10; DB 9; Length 245;
Best Local Similarity 100.0%; Pred. No. 2.6e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTCG 10
      |||||
Db      236 CGAACGTCG 245

RESULT 90
HSA415198/c
LOCUS      HSA415198      245 bp      DNA      linear      PRI 12-OCT-2001
DEFINITION Homo sapiens partial IGVKL6 gene for immunoglobulin kappa chain
             variable region, donor BJ, cell121.
ACCESSION  AJ415198
VERSION     AJ415198.1 GI:16076111
KEYWORDS   IGKV gene; immunoglobulin kappa chain; variable region.
SOURCE     Homo sapiens (human)
ORGANISM   Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE  1
AUTHORS    Goossens,T., Brauning,A., Klein,U., Koppers,R. and Rajewsky,K.
TITLE      Receptor revision plays no major role in shaping the receptor
            repertoire of human memory B cells after the onset of somatic
            hypermutation
JOURNAL    Eur. J. Immunol.
REFERENCE  2 (bases 1 to 245)
AUTHORS    Brauning,A.
TITLE      Direct Submission
JOURNAL    Submitted (21-SEP-2001) Brauning A., Pathology, University of
            Frankfurt, Theodor Stern Kai 7, 60590, GERMANY
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             /product="immunoglobulin kappa chain variable region"
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Best Local Similarity 100.0%; Pred. No. 2.6e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTCG 10
      |||||
Db      236 CGAACGTCG 245

RESULT 90
HSA415198/c
LOCUS      HSA415198      245 bp      DNA      linear      PRI 12-OCT-2001
DEFINITION Homo sapiens partial IGVKL6 gene for immunoglobulin kappa chain
             variable region, donor BJ, cell121.
ACCESSION  AJ415198
VERSION     AJ415198.1 GI:16076111
KEYWORDS   IGKV gene; immunoglobulin kappa chain; variable region.
SOURCE     Homo sapiens (human)
ORGANISM   Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE  1
AUTHORS    Goossens,T., Brauning,A., Klein,U., Koppers,R. and Rajewsky,K.
TITLE      Receptor revision plays no major role in shaping the receptor
            repertoire of human memory B cells after the onset of somatic
            hypermutation
JOURNAL    Eur. J. Immunol.
REFERENCE  2 (bases 1 to 245)
AUTHORS    Brauning,A.
TITLE      Direct Submission
JOURNAL    Submitted (21-SEP-2001) Brauning A., Pathology, University of
            Frankfurt, Theodor Stern Kai 7, 60590, GERMANY
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             /clone="cell121"
             /cell_type="B cell"
             /rearranged
             /note="class-switched lambda expressing"
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  V_region   <1. .>245
             /gene="IGVKL6"
             /product="immunoglobulin kappa chain variable region"
ORIGIN
Query Match      100.0%; Score 10; DB 9; Length 245;
Best Local Similarity 100.0%; Pred. No. 2.6e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy      1 CGAACGTCG 10
      |||||
Db      245 CGAACGTCG 236

RESULT 91
HSA415191
LOCUS      HSA415191      247 bp      DNA      linear      PRI 12-OCT-2001
DEFINITION Homo sapiens partial IGVKAL7 gene for immunoglobulin kappa chain
             variable region, donor BJ, cell152.
ACCESSION  AJ415191
VERSION     AJ415191.1 GI:16076104
KEYWORDS   IGKV gene; immunoglobulin kappa chain; variable region.
SOURCE     Homo sapiens (human)
ORGANISM   Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE  1
AUTHORS    Goossens,T., Brauning,A., Klein,U., Koppers,R. and Rajewsky,K.
TITLE      Receptor revision plays no major role in shaping the receptor
            repertoire of human memory B cells after the onset of somatic
            hypermutation
JOURNAL    Eur. J. Immunol.
REFERENCE  2 (bases 1 to 247)
AUTHORS    Brauning,A.
TITLE      Direct Submission
JOURNAL    Submitted (21-SEP-2001) Brauning A., Pathology, University of
            Frankfurt, Theodor Stern Kai 7, 60590, GERMANY
FEATURES
  source     1. .247
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             /db_xref="taxon:9606"
             /clone="cell152"
             /cell_type="B cell"
             /rearranged
             /note="class-switched lambda expressing"
  gene       1. .247
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  V_region   <1. .>247
             /gene="IGVKAL7"
             /product="immunoglobulin kappa chain variable region"
ORIGIN
Query Match      100.0%; Score 10; DB 9; Length 247;
Best Local Similarity 100.0%; Pred. No. 2.6e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTCG 10
      |||||
Db      238 CGAACGTCG 247

RESULT 92
HSA415191/c
LOCUS      HSA415191      247 bp      DNA      linear      PRI 12-OCT-2001
DEFINITION Homo sapiens partial IGVKAL7 gene for immunoglobulin kappa chain
             variable region, donor BJ, cell152.
ACCESSION  AJ415191
VERSION     AJ415191.1 GI:16076104
KEYWORDS   IGKV gene; immunoglobulin kappa chain; variable region.
SOURCE     Homo sapiens (human)
ORGANISM   Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE  1
AUTHORS    Goossens,T., Brauning,A., Klein,U., Koppers,R. and Rajewsky,K.
TITLE      Receptor revision plays no major role in shaping the receptor
            repertoire of human memory B cells after the onset of somatic
            hypermutation
JOURNAL    Eur. J. Immunol.

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REFERENCE 2 (bases 1 to 247)
AUTHORS   Brauning, A.
TITLE     Direct Submission
JOURNAL   Submitted (21-SEP-2001) Brauning, A., Pathology, University of
          Frankfurt, Theodor Stern Kai 7, 60590, GERMANY
FEATURES  Location/Qualifiers
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            /organism="Homo sapiens"
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            /db_xref="taxon:9606"
            /clone="cell152"
            /cell_type="B cell"
            /rearranged
            /note="class-switched lambda expressing"
   gene    1..247
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            <1..>247
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            /product="immunoglobulin kappa chain variable region"
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Query Match 100.0%; Score 10; DB 9; Length 247;
Best Local Similarity 100.0%; Pred. No. 2.6e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
    |||||
Db 247 CGAACGTTTCG 238

RESULT 93
HS165A6F 249 bp DNA linear PRI 18-OCT-1995
LOCUS   H.sapiens CpG island DNA genomic MseI fragment, clone 165a6,
DEFINITION forward read cp9165a6.ft1a.
ACCESSION 257132
VERSION 257132.1 GI:1028363
KEYWORDS CpG island; genomic MseI fragment.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
          Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1
AUTHORS Cross, S.H., Charlton, J.A., Nan, X. and Bird, A.P.
TITLE Purification of CpG islands using a methylated DNA binding column
JOURNAL Nat. Genet. 6 (3), 236-244 (1994)
MEDLINE 94282070
PUBMED 8012384
REFERENCE 2 (bases 1 to 249)
AUTHORS Dodsworth, S.J., Huckle, E., Wilkinson, P. and Micklem, G.
TITLE Direct Submission
JOURNAL Submitted (16-OCT-1995) The Sanger Centre, Hinxton, Cambridgeshire,
          CB10 1RQ, England. E-mail contact: humquery@sanger.ac.uk
COMMENT Clones are available from the UK MRC Human Genome Mapping Project
          Resource Centre, Hinxton, Cambridgeshire CB10 1RQ, UK. See URL:
          http://www.hgmp.mrc.ac.uk/ for details
          or contact: bihelp@hgmp.mrc.ac.uk.

FEATURES  Location/Qualifiers
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Query Match 100.0%; Score 10; DB 9; Length 249;
Best Local Similarity 100.0%; Pred. No. 2.6e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
    |||||
Db 55 CGAACGTTTCG 46

RESULT 95
HS285551 249 bp DNA linear PRI 01-APR-1997
LOCUS   H.sapiens BF2N2-Kg3-C08.gene L2 for immunoglobulin kappa chain
DEFINITION variable region.
ACCESSION 285551
VERSION 285551.1 GI:1922475
KEYWORDS immunoglobulin; immunoglobulin kappa chain; joining region;
          variable region.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
          Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1
AUTHORS Foster, S.J.
JOURNAL Unpublished
REFERENCE 2 (bases 1 to 249)

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REFERENCE 2 (bases 1 to 247)
AUTHORS   Brauning, A.
TITLE     Direct Submission
JOURNAL   Submitted (21-SEP-2001) Brauning, A., Pathology, University of
          Frankfurt, Theodor Stern Kai 7, 60590, GERMANY
FEATURES  Location/Qualifiers
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            /rearranged
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            /product="immunoglobulin kappa chain variable region"
ORIGIN
Query Match 100.0%; Score 10; DB 9; Length 247;
Best Local Similarity 100.0%; Pred. No. 2.6e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
    |||||
Db 247 CGAACGTTTCG 238

RESULT 93
HS165A6F 249 bp DNA linear PRI 18-OCT-1995
LOCUS   H.sapiens CpG island DNA genomic MseI fragment, clone 165a6,
DEFINITION forward read cp9165a6.ft1a.
ACCESSION 257132
VERSION 257132.1 GI:1028363
KEYWORDS CpG island; genomic MseI fragment.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
          Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1
AUTHORS Cross, S.H., Charlton, J.A., Nan, X. and Bird, A.P.
TITLE Purification of CpG islands using a methylated DNA binding column
JOURNAL Nat. Genet. 6 (3), 236-244 (1994)
MEDLINE 94282070
PUBMED 8012384
REFERENCE 2 (bases 1 to 249)
AUTHORS Dodsworth, S.J., Huckle, E., Wilkinson, P. and Micklem, G.
TITLE Direct Submission
JOURNAL Submitted (16-OCT-1995) The Sanger Centre, Hinxton, Cambridgeshire,
          CB10 1RQ, England. E-mail contact: humquery@sanger.ac.uk
COMMENT Clones are available from the UK MRC Human Genome Mapping Project
          Resource Centre, Hinxton, Cambridgeshire CB10 1RQ, UK. See URL:
          http://www.hgmp.mrc.ac.uk/ for details
          or contact: bihelp@hgmp.mrc.ac.uk.

FEATURES  Location/Qualifiers
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            /sex="male"
            /tissue_type="blood"
            /clone_lib="CGI-1"
            /dev_stage="adult"
ORIGIN
Query Match 100.0%; Score 10; DB 9; Length 249;
Best Local Similarity 100.0%; Pred. No. 2.6e+04;

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AUTHORS Foster, S.J.
 TITLE Direct Submission
 JOURNAL Submitted (06-FEB-1997) Foster S.J., Department of Internal Medicine, Harold C. Simmons Arthritis Research Center, University of Texas Southwestern Medical Center, 5323 Harry Hines Blvd., Dallas, TX 75235-8884, USA

FEATURES
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 /cell_type="CD5(-)IgM(+) B lymphocyte"
 /tissue_type="blood"
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 /gene="BF2N2-Kg3-C08"
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 /note="Vk3 family, L2"

ORIGIN
 Query Match 100.0%; Score 10; DB 9; Length 249;
 Best Local Similarity 100.0%; Pred. No. 2.6e+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 Db 226 CGAACGTTTCG 235

RESULT 96
 LOCUS HS285551/c 249 bp DNA linear PRI 01-APR-1997
 DEFINITION H.sapiens BF2N2-Kg3-C08 gene L2 for immunoglobulin kappa chain variable region.
 ACCESSION Z85551
 VERSION Z85551.1 GI:1922475
 KEYWORDS immunoglobulin; immunoglobulin kappa chain; joining region; variable region.
 SOURCE Homo sapiens (human)
 ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.

REFERENCE
 1 Foster, S.J.
 AUTHORS Unpublished
 JOURNAL
 REFERENCE 2 (bases 1 to 249)
 AUTHORS Foster, S.J.
 TITLE Direct Submission
 JOURNAL Submitted (06-FEB-1997) Foster S.J., Department of Internal Medicine, Harold C. Simmons Arthritis Research Center, University of Texas Southwestern Medical Center, 5323 Harry Hines Blvd., Dallas, TX 75235-8884, USA

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 /cell_type="CD5(-)IgM(+) B lymphocyte"
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 1. .249
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 /note="Vk3 family, L2"

gene
 V_region

ORIGIN

Query Match 100.0%; Score 10; DB 9; Length 249;
 Best Local Similarity 100.0%; Pred. No. 2.6e+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 Db 235 CGAACGTTTCG 226

RESULT 97
 LOCUS HSA347589 250 bp DNA linear PRI 20-SEP-2001
 DEFINITION Homo sapiens partial IGKKA30 gene for immunoglobulin kappa chain variable region, isolate case3-cell129.
 ACCESSION AJ347589
 VERSION AJ347589.1 GI:15722836
 KEYWORDS IgVκ gene; immunoglobulin kappa chain; variable region.
 SOURCE Homo sapiens (human)
 ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.

REFERENCE
 1 Braeuninger, A., Spieker, T., Willenbrock, K., Gaulard, P., Wacker, H.H., Rajewsky, K., Hansmann, M.L. and Kueppers, R. Survival and clonal expansion of mutating 'forbidden' (immunoglobulin receptor-deficient) Epstein-Barr virus-infected B cells in angioimmunoblastic T cell lymphoma
 Unpublished
 2 (bases 1 to 250)
 Braeuninger, A.
 Direct Submission
 TITLE Submitted (20-AUG-2001) Braeuninger A., Pathology, University of Frankfurt, Theodor-Stern-Kai 7, 60590, GERMANY

JOURNAL
 REFERENCE 2 (bases 1 to 250)
 AUTHORS Braeuninger, A.
 TITLE Direct Submission
 JOURNAL Submitted (20-AUG-2001) Braeuninger A., Pathology, University of Frankfurt, Theodor-Stern-Kai 7, 60590, GERMANY

FEATURES
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 /protein_id="CAC79041.1"
 /db_xref="GI:15722837"
 /translation="GDRVITTCRASQGIKNDLGNYYQKPGKPKRLIYAASSLSQGVPSRFSGSGSGTEFTLTISSLQPEDFATYICLQHNSYPRTF"

gene
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V_region
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 /product="immunoglobulin kappa chain variable region"

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 Best Local Similarity 100.0%; Pred. No. 2.6e+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 Db 241 CGAACGTTTCG 250

RESULT 98
 LOCUS HSA347589/c 250 bp DNA linear PRI 20-SEP-2001
 DEFINITION Homo sapiens partial IGKKA30 gene for immunoglobulin kappa chain variable region, isolate case3-cell129.
 ACCESSION AJ347589
 VERSION AJ347589.1 GI:15722836
 KEYWORDS IgVκ gene; immunoglobulin kappa chain; variable region.

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SOURCE      Homo sapiens (human)
ORGANISM    Homo sapiens
REFERENCE   Eukaryota; Chordata; Craniata; Vertebrata; Euteleostomi;
AUTHORS    Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1
TITLE      Braeuninger, A., Spicker, T., Willenbrock, K., Gaulard, P.,
AUTHORS    Wacker, H.H., Rajewsky, K., Hansmann, M.L. and Kueppers, R.
TITLE      Survival and clonal expansion of mutating 'forbidden'
            (immunoglobulin receptor-deficient) Epstein-Barr virus-infected B
            cells in angioimmunoblastic T cell lymphoma
JOURNAL     Unpublished
AUTHORS     2 (bases 1 to 250)
REFERENCE   Braeuninger, A.
TITLE      Direct Submission
JOURNAL     Submitted (20-AUG-2001) Braeuninger A., Pathology, University of
            Frankfurt, Theodor-Stern-Kai 7, 60590, GERMANY
FEATURES   Location/Qualifiers
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            /db_xref="taxon:9606"
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            1..250
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            /gene="IGVKA30"
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            /product="immunoglobulin kappa chain variable region"
            /protein_id="CAC79041.1"
            /db_xref="GI:15722837"
            /translation="GDRVITCRASQGIKRWYQKPKAKRLIYAASSLSQSGVP
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            /gene="IGVKA30"
            /product="immunoglobulin kappa chain variable region"

ORIGIN
Query Match      100.0%; Score 10; DB 9; Length 250;
Best Local Similarity 100.0%; Pred. No. 2.6e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTC 10
    |||||
Db 250 CGAACGTTTC 241

RESULT 99
AF303897
LOCUS       AF303897             254 bp      DNA      linear      PRI 22-NOV-2000
DEFINITION Homo sapiens immunoglobulin kappa chain gene, partial cds.
ACCESSION   AF303897
VERSION     AF303897.1   GI:11275921
KEYWORDS    .
SOURCE      Homo sapiens (human)
ORGANISM    Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 254)
De Re.V., De Vita, S., Marzotto, A., Gloghini, A., Pivetta, B.,
Gasparotto, D., Cannizzaro, R., Carbone, A. and Boiocchi, M.
Pre-malignant and malignant lymphoproliferations in an HCV-infected
type II mixed cryoglobulinemic patient are sequential phases of an
antigen-driven pathological process
Int. J. Cancer 87 (2), 211-216 (2000)
JOURNAL     10861476
MEDLINE     20320827
PUBMED      10861476
REFERENCE   2 (bases 1 to 254)
AUTHORS    De Re.V., De Vita, S. and Marzotto, A.
TITLE      Sequence analysis of the immunoglobulin antigen receptor of
            hepatitis C virus-associated non Hodgkin's lymphomas suggests that
            the malignant cells are derived from the rheumatoid factor
            producing cells that occur mainly in type II cryoglobulinemia
JOURNAL     Blood (2001) In press
AUTHORS     3 (bases 1 to 254)
REFERENCE   De Re.V., De Vita, S. and Marzotto, A.
TITLE      Direct Submission
JOURNAL     Submitted (01-SEP-2000) OS1, CRO, IRCCS, Pedemontana Occidentale
            12, Aviano, PN 33081, Italy
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